Cameras

Different Formats
Repair and Use

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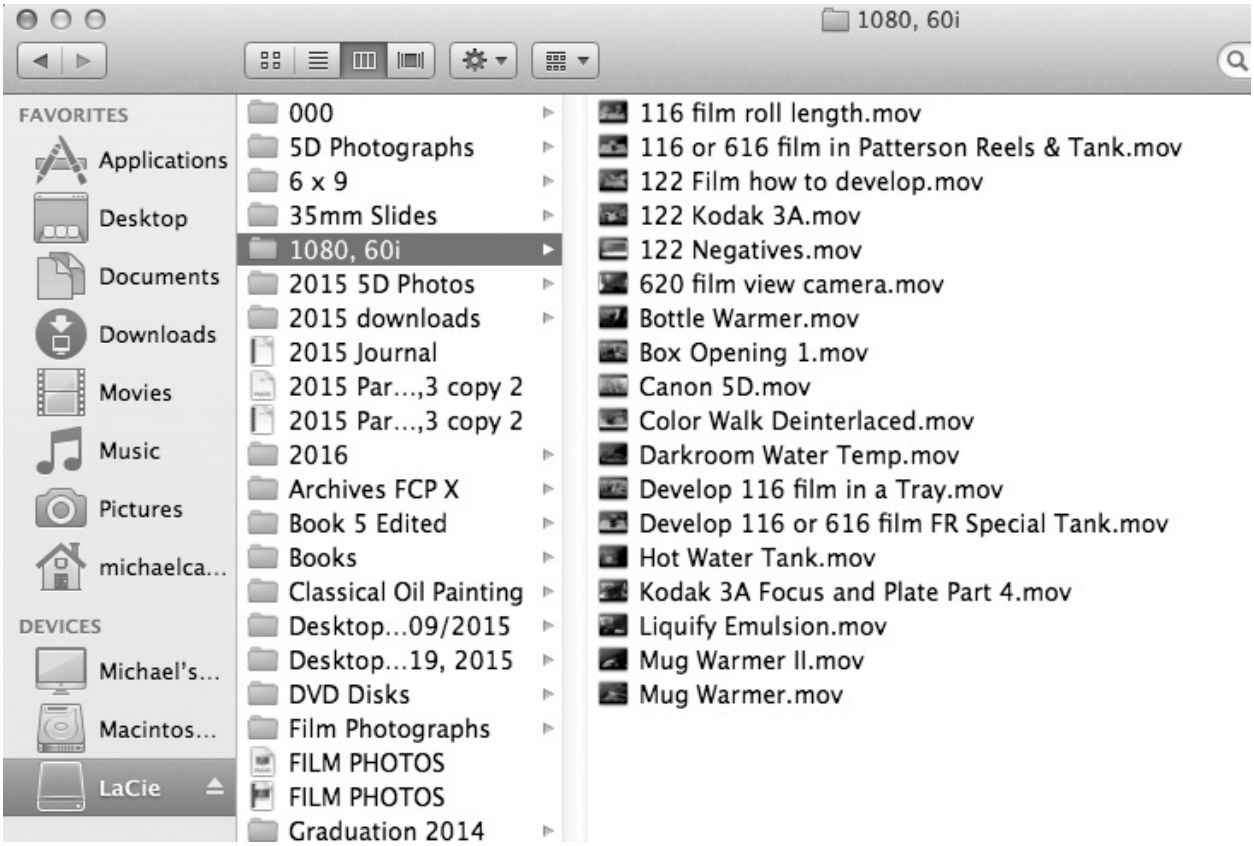
Introduction



Shown above is where to find my videos about cameras etc on a hard drive. They may also be backed up somewhere on another hard drive, like the Silver Stripe Drive, or on Timemachine somewhere, the Gold Stripe Drive. I just now put them onto the Silver Stripe Drive. I didn't know that they were not backed up like that. 64.97GB! No problem. That drive is 2.5TB and the LaCie is 3TB.

Videos are on YouTube under studiocarter1 and some are on Vimeo under studiocarter:

https://www.youtube.com/user/studiocarter1 there are 19 videos there.

https://vimeo.com/studiocarter there are 5 videos there.

Videos are an important way to understand how to use a camera.

What I need, though, is a way to record everything about a camera. How much did I pay when I bought it? From who? When? Was it repaired? etc. How is it used? Are there any accessories for it? So, this journal is started.

6 x 9 Cameras

Shooting Gear

1-22-2016
Large black & white prints are made using two different 6x9 cameras. One range finder is in meters and the other one is in feet. A washer is needed to put under the camera on the tripod. Notes are taken in the big book this year and were taken in the smaller book last year. I may switch back. A brilliant viewfinder in in a box. And incident light readings are taken every shot to get to know what is going on.

Kodak 620 Junior Series II

February 14, 2016 This is a tiny camera with a good bellows for some unknown reason. So it is worth a try. I got it August 27, 1999 for $13 including shipping and handling from Jim Briner, 14604 Barton Blvd SW, Cumberland MD 21502. cmb@mail.gcnet.net.

I never used it.

It has a Kodak Bitmat lens f11- f32, T B 25, 50, 100. There is a door over the red film counting window. That is a nice touch. It opens and closes cleanly and with a snap.

The lens fits some adapters and filters found for it. 1 1/8” in diameter or 28mm. A Kodak 6-A adapter ring fits it. The adapter unscrews and accepts series 5 filters, which I put collection of into a shoe box with the camera. Two each of Y, O, R, B, G and neutral density. There are also close up lenses.

It needs a little more flat black paint inside it, which I can do now that I have a new bottle.

It is a lot more versatile than the Brownie Kodak Hawkeye and it is a 6x9 format to boot!

Look in the dark blue EDITIONS shoebox.

Zeiss Ikon Ikonta 521/2 J 65019

This camera has the supposedly best lens of all the various cameras that I have.

However, it had to be sent off to be repaired.

Now it has a new problem. I may have to send it back.

EBay has records of when I bought everything. Here is a screen capture of the purchase.

ORDER DATE
Sep 05, 2015

ORDER TOTAL
US $50.00
+ US $11.30 shipping

1 item sold by janicep323

Zeiss Ikon Ikonta 521/2 Camera with Compur Rapid Shutter
(131591415746)

ITEM PRICE:
US $50.00

Repair records need to be found and inserted here. I'd sent it to http://www.flutotscamerarepair.com and had a positive experience.

Email:

-----Original Message----- From: Michael Carter
Sent: Thursday, September 10, 2015 2:34 PM
To: carolmiller@flutotscamerarepair.com
Subject: Zeiss Ikon Compur Rapid

Hi,
Please put me on the list. The camera is a medium format 6x9 Zeiss Ikon with a Compur-Rapid shutter.
Michael Carter
michael.studiocarter@gmail.com
412-973-4316

Sent from my iPad

On Thu, Sep 10, 2015 at 5:50 PM, Carol <flutotscamera@earthlink.net> wrote:
Hi Michael,

What is it's problem?

Carol

From: Michael Carter
Sent: Friday, September 11, 2015 7:29 AM
To: Carol
Subject: Re: Zeiss Ikon Compur Rapid

The shutter will not cock. The lever moves but does not stay up ready to be fired. The trigger will also move over but does nothing. The iris does not change. Focus does move but it is tight. The speed setting does not move all the way fast, it goes down to B, not working, but not very high over 50.
Thanks for the quick reply.
This camera has the Tessar lens and is worthy of repair.

Michael

On Sep 11, 2015, at 4:43 PM, Carol <flutotscamera@earthlink.net> wrote:

Hi Michael,

Go ahead and send it in and I will see what I can do to get it working again.
Please send along the shipment form, link is on my contact page...scroll down to find it.

Thanks,

Carol

From: Michael Carter
Sent: Saturday, September 12, 2015 8:43 AM
To: Carol
Subject: Re: Zeiss Ikon Compur Rapid

It's on the way. Usps 1315 1490 0000 5341 1077
Maybe on Monday.
Thank you

The shipping cost me $16.15 USPS insured.

Carol 9/14/15
<flutotscamera@earthlink.net>

Hi Michael,

Your camera arrived today.

Here is to verify your info and the item you sent:
Arrived 9-14-15
Michael Carter
1207 East End Ave.
Pittsburgh, PA 15218

Return via USPS $150 ins.

1 – Zeiss Ikon Ikonta52 1/2 camera
Ser# J65019
Shutter : Zeiss Ikon Compur Rapid f3.5
Ser#4272954
Front lens cell: Tessar f3.5 f10.5cm
Carl Zeiss Jena Ser# 2388288
Note: SHutter Jammed
leather strap broken.

Thanks,

Carol

Carol 10/7/15
<flutotscamera@earthlink.net>

Hi Michael,

Your camera will be done soon, just need to reassemble and focus the front lens.

Here is your invoice:

1 – Zeiss Ikon Ikonta 52 1/2 camera
Ser# J65019
Shutter : Zeiss Ikon Compur Rapid f3.5
Ser#4272954
Front lens cell: Tessar f3.5 f10.5cm
Carl Zeiss Jena Ser# 2388288
Leather strap broken – still broken.
Didn't have any part to fix.

CLAC $100.00
S&H w/$150 $ 20.00

Total due $120.00

I accept check, money order or paypal.
If paying through paypal,
check services and send payment to:
flutotscamera@earthlink.net

Thanks,

Michael Carter 10/8/15
<michael.studiocarter@gmail.com>

PayPal was used to send you $120
Oh boy

Carol 10/8/15
<flutotscamera@earthlink.net>

Hi Michael,

Thank you for payment! I will email you when it is on its way home. I found another problem but fixed it already, the trip button and shaft was sticky too. Just need to get it focused now.

Carol

Carol 10/9/15
<flutotscamera@earthlink.net>

Hi Michael,

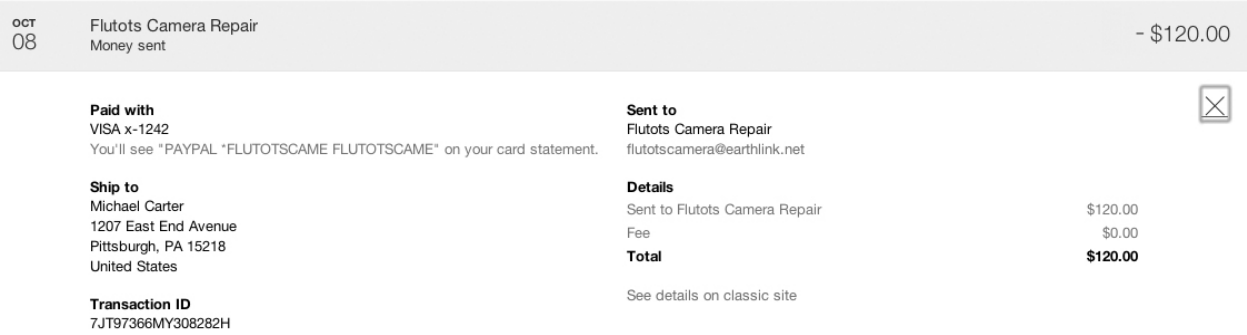
We sent your camera home today. Your USPS # is:
1315 1409 0000 0429 0010

Your Trip button is getting a little worn so when you use a cable release it is doesn't work right wiggle it
a bit and it will work. Also use a cable release with a short throw. Since I had to use some thin oil on the gear train it might leach onto the blades especially in hot weather.

If you see a little oil on the blades like a little spot or so that is ok. If it gets bad just send the camera back and I shall clean it off.
If you have any problems or questions just let me know.

Michael Carter 10/9/15
<michael.studiocarter@gmail.com>

Carol,
Thank you. I am looking forward to using it.
I really like your great communication!
It helps a lot.
Michael



OCT 08 Flutots Camera Repair — Money sent — - $120.00

Paid with
VISA x-1242
You'll see "PAYPAL *FLUTOTSCAME FLUTOTSCAME" on your card statement.

Ship to
Michael Carter
1207 East End Avenue
Pittsburgh, PA 15218
United States

Transaction ID
7JT97366MY308282H

Sent to
Flutots Camera Repair
flutotscamera@earthlink.net

Details

Sent to Flutots Camera Repair	$120.00
Fee	$0.00
Total	**$120.00**

See details on classic site

January 1, 2016

The first roll of film for 2016 was shot with this camera. It is not the first roll shot with this camera. Roll 33 last year was. Shot #2 was an oops. I don't remember why. This roll is the second one shot with this camera. There was a problem with the first shot.

The camera didn't open all the way to click. The front was tilted and had to be pulled to straighten it. That was fine. However, the trigger may have not been set properly. The trigger, as I call it, is underneath the lens and shutter and is pushed by a black pad, operated by the taking button. I had had a problem with this in another camera. So, I pushed the black pad to the right to move the trigger. It offered a little resistance and then clicked. I thought I'd taken a picture. I was wrong. A blank frame was on the developed negative. As a result, I had to roll the film to shot #2 to get the button to work again. If I had cocked the shutter and pushed the pad again, a shot would have been taken. It is a way to defeat the X double exposure thing. My notes say, "#1 got tripped as I set the trigger inside."

Zeiss Ikon Ikonta 521/2 D 95938

ORDER DATE
Sep 17, 2015

ORDER TOTAL
US $39.99

+ US $5.25 shipping

1 item sold by carlray1

Zeiss Ikon IKONTA 521/2 Germany Vintage Camera Novar 3.5/10,5cm Compur Rapid
(252093733942)

ITEM PRICE:
US $39.99

The previous owner of this camera really messed with it. A focus tab stop that is attached to the shutter, not to the focus ring, is ripped off. There are scratches on the retaining ring inside the bellows. Linkage that connects the button used to shoot a picture is disconnected way back under the bellows. The silver bar poked a hole into the bellows. The description said that the timer works. It does. But you have to push the trigger over more; the button will not move it enough. Use it manually with the black push pad and a finger. The slow speeds work, too. He must have done a CLA or sorts. The front element comes off. The lenses are real clean.

I screwed it back on about where it came off. I shot some film with it but then found there was a hole in it. The date was Sept. 21, 2015. The film was not contact printed. Then I patched the hole. Never shot more with it. Lately I took off the retaining ring inside and the shutter assembly came off. That was pretty easy to do. The metal front has a notch in it where a pin on the back of the shutter fits into. It allows a little play back and forth but not much. Three washers can come off real easy. They rip easily, too. I had to glue the top one back down. It kept falling off after it ripped by the hole. The bellows has a metal thing it is glued to. It came off the back of the metal part with the notch that clicks upright the side arms attach to.

Removing the shutter allowed access the underside. I was able to figure out how to reattach the linkage after the shutter was removed. The side black arm part pops off the pins it rotates on. I slid a flat screwdriver into

the front and twisted. It came right out. Then I had to push the button to move the silver bar so it was further than where the back pin goes. It was awkward but I did it. Now it works like it should. However, after I patched the hole, again, I ripped the front of the bellows when I put the retaining ring back on. It was very difficult to put the ring on. Much patching with liquid plastic, Plasti-Dip, was done and I may shoot with it yet. Leaks were really huge. Now the camera needs a new bellows. The camera tech lady, Carol, said to use Bald Mt for new bellows. I told her he already has one of mine.

Do not close this camera. The bellows will surely leak again. Film may be shot in it as is, at least one time.

Check focus with ground glass first.

January 15, 2015 This lens and shutter combination really attracts me. This camera is not usable; the light was checked one last time last night. Light was shined into the back and it came out around the shutter outside! I never saw that before.

This morning I went on line and bought another camera that has the same lens. Perhaps I could swap lenses between the two if I could figure out how to focus them properly. It depends on how you screw them onto the threads. There are different starting positions and they effect focus, I think.

A new file was begun in Cameras/Zeiss Ikon Cameras/Ikonta Novar 3.5.

I want to be able to swap lenses between cameras.

Zeiss Ikon Ikonta 521/2 R 15891

ORDER DATE
Oct 11, 2015

ORDER TOTAL
US $37.00
See description

1 item sold by jsonthes

Zeiss Ikon Ikonta 521/2 with leather case excellent condition
(321884480633)

Add note

ITEM PRICE:
US $37.00

Novar Anastigmatic f4.5 lens. Compur shutter B - 250. Focus is loose. A hole was patched in the right front top of the bellows looking into the back. The timer gets stuck - do not use it. Slow speeds are slow, 1/10 is working. The foot has to be pulled to get the door to open.

Zeiss Ikon Nettar 515/2 F 18315

ORDER DATE
Apr 06, 2015

ORDER TOTAL
US $39.95

+ US $5.84 shipping

1 item sold by jennleecstuff

VTG ca. 1938 CAMERA = ZEISS IKON NETTAR 515/2 EXPOSED BROWNIE 120 FILM IN CAMERA
(261831075705)

Add note

ITEM PRICE:
US $39.95

Novar Anastigmat f4.5 lens in a Kilo shutter, B - 150. Iris settings are on top of the shutter and can be read from behind the camera. I like that. It needs the Brilliant View Finder attachment. It has the little door over the film number window.

This camera is a user. I think it is the one I used first on Edgewood Day, August 29?, 2015, with the first and the second rolls of film, Pan F & Delta 100. Focus is in Meters. I remember looking down at it to set the iris and was thinking that I liked doing it that way, later, when I used the other cameras I became annoyed that I had to look up at the front to see the iris settings and was disappointed.

Double check the bellows.

Voigtlander Bessa 6x9 f3.5 Compur Rapid

This is the camera I bought downtown for about $200.

On Monday, December 29, 2014 I bought a camera in the camera repair shop on Market Street downtown. I had ridden the bus and was going home from the South Side. It was my habit to walk across the 10th Street bridge. So a walk to Market Street was no biggie. I was surprised to see that the shop was still there and open for business.

A better 6x9 camera was desired. More shutter speeds and a larger f-stop would be nice. They had a camera for sale. It had a much larger lens that was very clean. It had a 1/400 second shutter speed. The camera was serviced and guaranteed for a year.

The camera is a Voigtlander Bessa with a Compur-Rapid f-3.5 shutter, which I now know to be one of the best sought after shutters. I really liked it but had to walk around the block one time to think it over. They came down in price and I bought it for $294 including tax. Support the locals I figured. The tripod sockets have 1/4 x 20 thread adapters unlike the Nettar camera which lacked them. Now I have two to use.

I rode the bus home happy as a clam that I had Social Security money.

The lens doesn't look that bad in real life, it is pretty clean actually. It is a Voiktar, which is the lowest quality. Vaskar, Skopar, and the Color Skopar are the other three offered. The shutters are Prontor, Comput, and Compur Rapid. This is the best and dates the camera to 1949, when better shutters were added to the 1937 model. No mask was included for 6x4.5 format.

http://forum.mflenses.com/voiglander-bessa-6x9-compur-rapid-voigtar-lens-t30384,highlight,voigtlander.html

Here is a thread with pictures of one just like mine.

There are some things to know about this camera. One is that the 1/400 speed needs to be set hard. It requires pulling on the cocking lever quite a bit, but that will not hurt anything. Just do not change it until you fire it off. Another is that the winding crank on the outside must must must be pushed in all the way when loading film. Then the door may be closed. Otherwise the film will back roll and the crank will be loose. Worse still, the film may wind wrong and jam. I've torn more than one roll of backing paper and crinkled film doing it wrong. Then I learned that the spring on the top left of the inside of the film supply chamber was too loose so I pulled it out to put more pressure on the supply roll and push it closer into the center of the camera. That centered the numbers in the ruby window. Finally, the take up spool has to have a cross in the ends and not just the single groove. Kodak film no longer has the numbers that are needed for this camera. Arista is ok. Ilford, too.

Hold the camera vertically in the left hand. Face the front to the right. Put your left index finger under the strap and point to the right. Hold the front with the right hand on both sides. With the left thumbnail, push the silver button away from you. Pull with the right and it pops right open.

To close it, push that button away from you in order to take pressure off the locking spring, using the thumb fingernail again. When the camera back is firmly shut, pull the button with the index fingernail towards you and there will be a locking “click” heard.

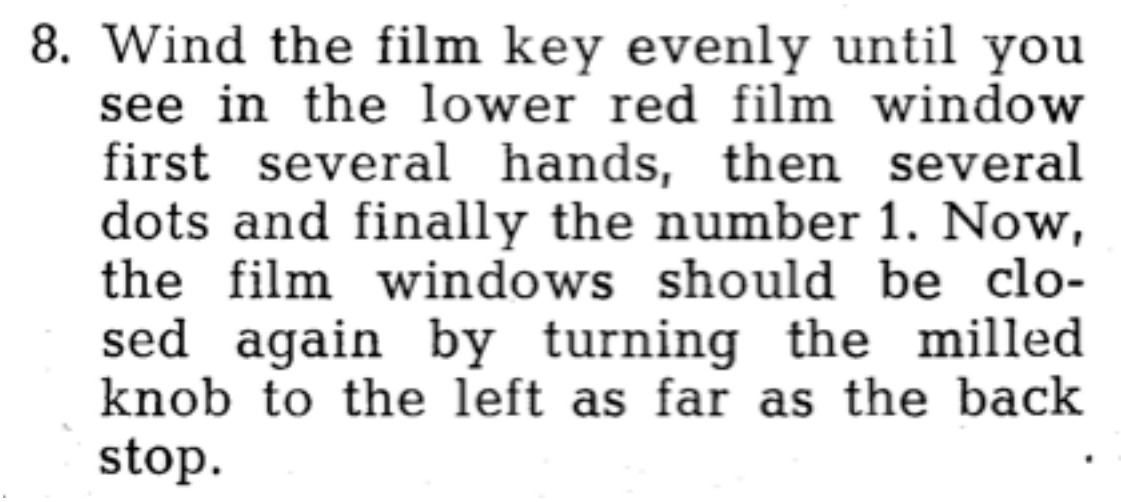
Films shot so far with this camera are:

#5 HP5+, 6 HP5+, 29 FP4+, 30 FP4+, #58 Arista 100,

and that last one has not been developed yet as of Oct. 10, 2016

Problems have been that the film jams and has not wound correctly every time. I have had to make adjustments to my technique frequently with this camera more than with any other.

It seems like the ruby window covering device is not correct as is. It only covers one.


8. Wind the film key evenly until you see in the lower red film window first several hands, then several dots and finally the number 1. Now, the film windows should be closed again by turning the milled knob to the left as far as the back stop.

I cannot make it cover both windows to close them both. Only one.

And on apug.org there is some good advice on using old folders:

http://www.apug.org/forum/index.php?threads/arista-100.140930/

Arista EDU 100 plus used in a Voigtlander Bessa, no number, 6x9 folder with two red ruby Windows, does not quite line up. But it is good enough to use.

When the film was removed, it was bunched a little on the side of the numbers which may have accounted for misalignment of numbers in the window.

But the winding crank was pushed in all the way so it was tight and did not let loose and back wind any. That is warned about in the manual. It had to be learned the hard way.

I still get good pictures.

If I keep using this camera I'll master it eventually. It is my pocket camera.

I began shooting on the first of the 4 white squares, adding one each wind. After #4 had been reached, the remaining shots were done on the last square, never on the number. The hole in the backing paper had me worried.

3 rolls will be developed together in D-76 the same 8-10 minuets.

The weather was so sunny this morning in October 2016 one roll was shot almost entirely before church. Afterwards, I had to wait for a clear sky patch to take a shot and ended with one in overcast conditions.

This afternoon is now so dark the 400 speed film could be used. But it is time for a nap.

Two things happened to make the film off center. One was that the pressure tab on the feed spool on the top or number side, left top, was too far in. I pulled it out more with an exact knife, as there is a hole in it to allow for that. That pushed the roll of film further towards the center of the camera. The other is that the wind up film spool needs to have the cross and not the bar. The bar alone will not be enough to engage the winder at all or not all the time. That didn't happen when I shot the film. But it did happen when I practiced with old backing paper on spools and with old

developed film on backing paper. That is when I learned about the cross being necessary on the take up spool.

Numbers did eventually line up correctly in the center of the ruby window. And I got it to happen more than one time. Film backing paper did not get crinkled along one edge any more.
Arista numbers are easily seen in dim light. The backing paper is black and the markings are light gray.
This film has been used before in this camera and no hold bothered any image. I used the numbers in the ruby window when winding it. This time I used the number 4 square just to add a little at the tail of the roll to be sure as it was pretty close to the hole.

My advice to the OP and anyone shooting 6x9 folders is to pay attention to proper film loading (as the OP has already noticed) and *not using low or medium speed film* (Foma 100/Arista EDU 100 is a ASA 50/64 film in most developers, BTW) unless you shoot from a tripod. The point is that slow films (unless you use a tripod) will not make use of the potential quality of the large negative. Consider using a ISO400 film instead, which allows you to stop down and use higher shutter speeds, which is crucial for good technical quality, as (1) the lenses found on these folders really need to be stopped down to f16 or f22 for good sharpness and reasonable DOF AND (2) usually are so unstable/shaky to hold and release (shutter) that there is a high chance of camera shake induced blur at anything than the highest shutter speeds (1/250 s and 1/500 s, if you are lucky and your camera sports a compur shutter). Do some tests like I did and you will find that hand held 1/100 s (in reality probably closer to 1/50 s on a old leaf shutter) WILL result in a evident loss of sharpness. The bottom line is that any possible drawback of ISO400 film (larger grain relative to ISO100 class) is usually irrelavant with a negative of that size (unless you go to really BIG enlargement ratios) and more than compensated for by the advatanges of using higher shutter speed and smaller apertures.

Kodak no longer has numbers on the backing paper that line up with the window, Ilford's is ok still I guess, and I have yet to use Fuji.
Mnemosyne, great advice, thanks. 3 of the rolls ARE 400 speed. I shot the 100 using the sunny 16 rule hand held. 3 were shot at f16 because the

weather was bright and sunny. Then a G Wratten filter was tried to get darker blue sky patches. 400 on a sunny day was possible and worked on an earlier roll. Pictures are sharp at 1/400 fF22 without filters. I never considered sharpness except with a Pentax 6x7 and mirror slap and long lenses. Now I will add the folders to make a list. I did have blurry pictures with a Ikonta on a dark afternoon and you are right. A solid shot just could not be achieved propping the camera next to a phone pole or setting it on a wall. A tripod was needed along with a cable release. My goal is to print 12x18 or a little larger on 16x20 paper trimmed to some standard size, yet to be figured out.

we should not forget that up to the 1950s it was normal to make contact prints on 7.5x10 cm paper from the negatives or very tiny "enlargements" at best. So it really didn't matter very much which shutter speeds you used hand held or which aperture or if the focus was spot on. The size of the negative would really help to get acceptable results. But *we* tend to use these cameras with different expectations in mind, as nowadays 35mm is already capable of quite remarkable quality. So I think most users expect a substantial boost in quality compared to a (quality) 35mm negative to make bigger enlargements.

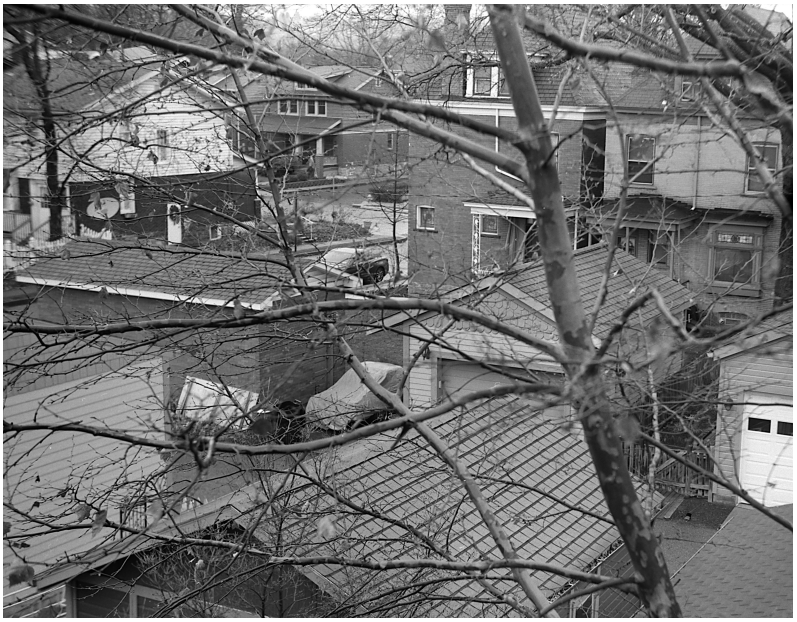
The camera does fit into my trousers pocket but pulls the pants down. Old timers wore suspenders or "braces" to hold them up.
Spacing starts with the first square, but you run out of them too soon, so, film may be advanced 1/2 square each frame, or just as the square appears in the window, to achieve the maximum space between negatives. There are 4 squares. Half step advances comes out just right. Something like that. The last square could be moved up more in the window each wind further. I'll try that next roll. This roll started with the number just barely visible in the narrow part of the window. That is way easier to keep track of for me.

Films shot so far with this camera are:
#5 HP5+, that is 400 speed film. 6 HP5+, 29 FP4+, 30 FP4+, that is 125 speed film. #58 Arista 100.

The only way to see if 400 speed, tripod held, fast shutter, and small aperture shots are sharper than 100 speed, hand held, slower shutter, and wider aperture shots are indeed sharper would be to film the same subject on the same day with both films.

Short of that look at the ones shot already.

Roll 5, #4, HP5 400, f22 1/400 hand held.



There was a blob on the neg and it was cropped.

Roll 6, #5, HP5 400, Mitchell tripod with cable release, f8 1/25 infinity

Both of these look awesome and sharp to me. They could be scanned at a very high resolution again but I have yet to see any blurry parts.

Roll 29, #2, FP4 125, f16 1/100 hand held

Roll 29, #4, FP4 125, f8 1/100 overcast conditions, hand held.

Roll 30, #3, FP4 125, f22 1/100 hand held.
Those are some samples of tripod and hand held, slow and fast shots. They were all taken with the Voigtlander Bessa. Most shots are f16 1/100

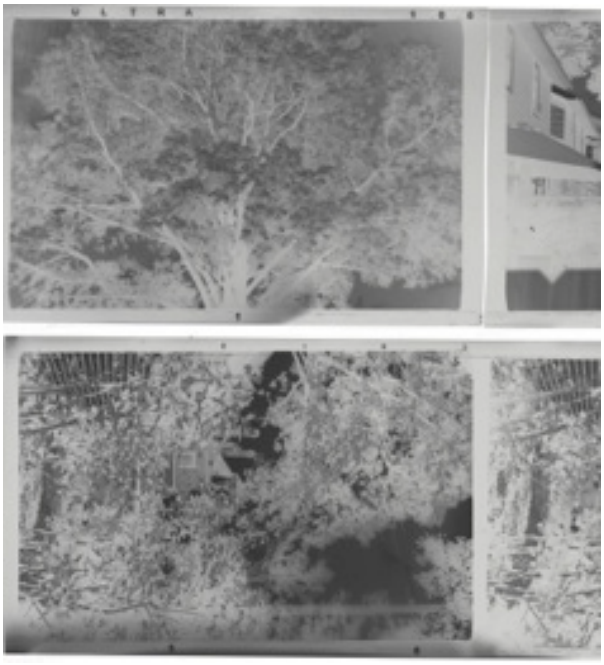
Roll 30, #5, FP4 125, f11 1/100 hand held

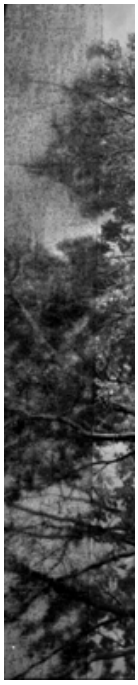
I can't tell. They all look great to me.

Another thing about this camera

and winding film to start with, have a empty roll of backing paper handy for reference so you know what is going by the window and where the numbers are.

I had to open the back of the camera under the safe light in the Darkroom to see if the numbers had been reached yet with Arista 100 black paper. That fogged the edges some in at least two places. One was small. One was big.





I was worried about the hole at the end of the film backing paper. It is not a problem with 6x9 but it is with 6x6. Square format begins numbering much after the larger format does and so goes lower on the film.

What that problem was didn't get named until just a few days ago. There are threads on apug.org devoted to this film and it came up in one of them.

It is best with the 6x9 format and Arista film to just use the numbers on the backing paper.

Lens Effects

60-1 Arista 100 RED filter 1/100 f4, +3 80 light plus a little = f11. infinity

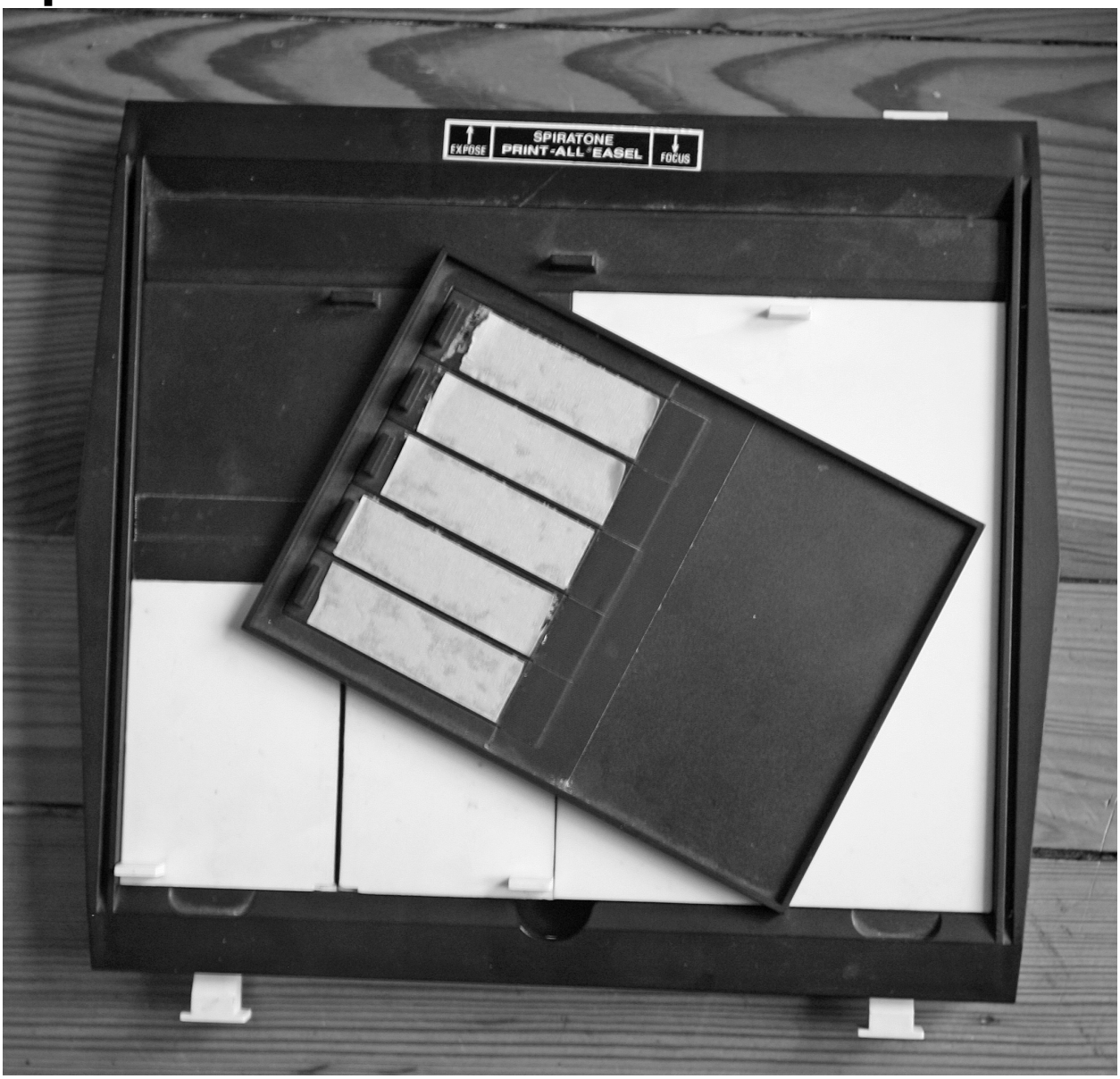
Note the flair just above the word ‘plus’. I had difficulty locating the beginning of the roll and opened the back in the darkroom under the safelight which is not really safe. Use it much further away after 20 minuets so you can see.

The lens had to be opened almost all the way. This is the first time it was used that way. The center is much more in focus than the edges are. They are way out of focus. The edges are also darker than the center.

That effect is new to me. This image had the file size reduced but it is here only to show the dark bulls eye edges and not the focus.

The tree was orange and green and I wanted to see if the RED filter would render white leaves. Not so much.

Spiratone Print-All-Easel



The Frosts gave me this, they are in ESAL art group. It is a darkroom accessory. 8x10 paper fits under all those doors. I took it just to get the piece on top. It fits in place of either half piece that is already on the hidden white plastic board. Focus the image on the white top of a closed door, then push the protrusions on the bottom and it raises the whole thing some. Paper is lower under the doors. Raising the bed equalizes focus.

This photograph is a little shaky but can still be read. There was no instruction book. 8x10 paper does fit under the edges some under all the doors. The long thin door only raises and will not come off. The other doors come off.

The long door can be used to expose a 10 inch by 1 inch strip of paper to maximum black without any film, just light on paper. Then, 4 or 10 different exposures can be made next to it. The smaller piece may have to overlap the opening as there is a border around the openings. Large sized exposures may make it easier to see maximum black. If enough light is passed through film base plus fog it has to eventually equal clear light on paper black.

122 Cameras

Kodak 3-A

On Wednesday February 4, 2015 a lot of stuff was bought on ebay. Cameras, film, reels, and tanks were collected so I can shoot in larger formats than 120 allows. It was great fun to bid and win auctions in the last seconds. Now I look forward to getting that stuff in the mail over many days to come.

I bought a Kodak No. 3A with film in it so it has two spools and a clean lens. This camera takes 122 film. The inside will need a mask or two rails to make it narrower to fit the film on a little bit.

https://www.youtube.com/watch?v=g6cZZg8GMyE

https://www.youtube.com/watch?v=U483SKQKr1Y

https://www.youtube.com/watch?v=b4wXcUYZ55s

https://www.youtube.com/watch?v=W0denr5zAzc

These are my videos about the camera.

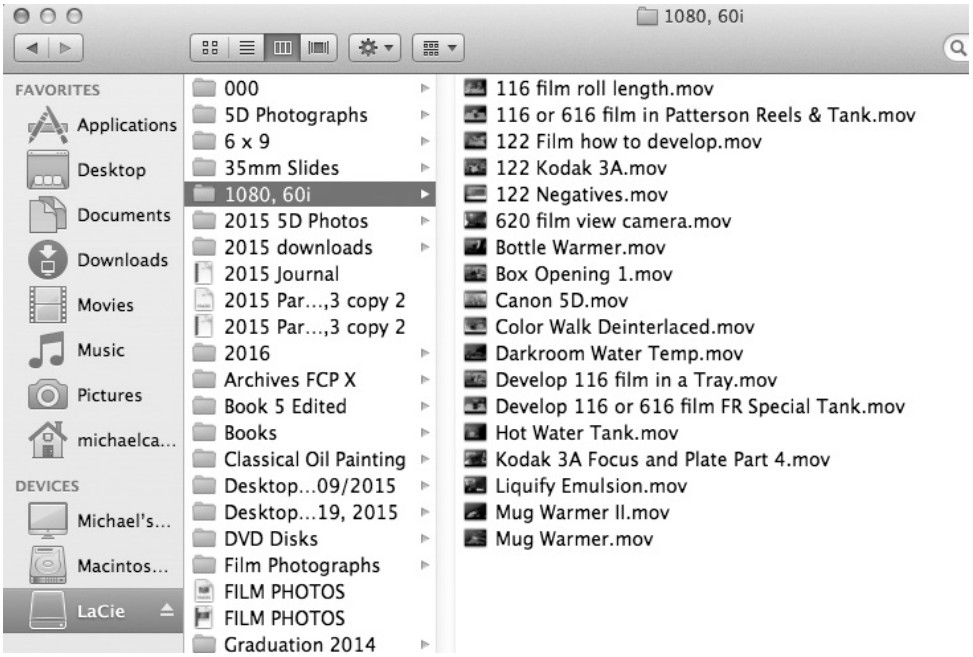
https://www.youtube.com/watch?v=DyVmChbz-NM

Here is another video about using 120 film in a 3-A but he has the numbers on the other side. My 3-A back will not close like his. My window is away from the strap end. I calculated shot spacing, too, only in the middle not along an edge.

My YouTube videos are backed up on two hard drives. One is the LaCie, it has a big blue eye. The other is the Silver Stripe Drive. It has to be plugged in using the small square transformer.

Notes are in the black spiral bound notebook starting on page 61. The small Yellow one uses dates so look for February 10, 2015.

I will not include processing information because that film is so scarce. I'll never have to process any of it ever again.



This is where I keep videos about this camera and others that I have made movies about.

ORDER DATE
Feb 04, 2015

ORDER TOTAL
US $39.95

+ US $5.95 shipping

1 item sold by 2013unitedstates

Vintage KODAK Pocket Kodak No. 3-A Folding Camera
(400848256896)

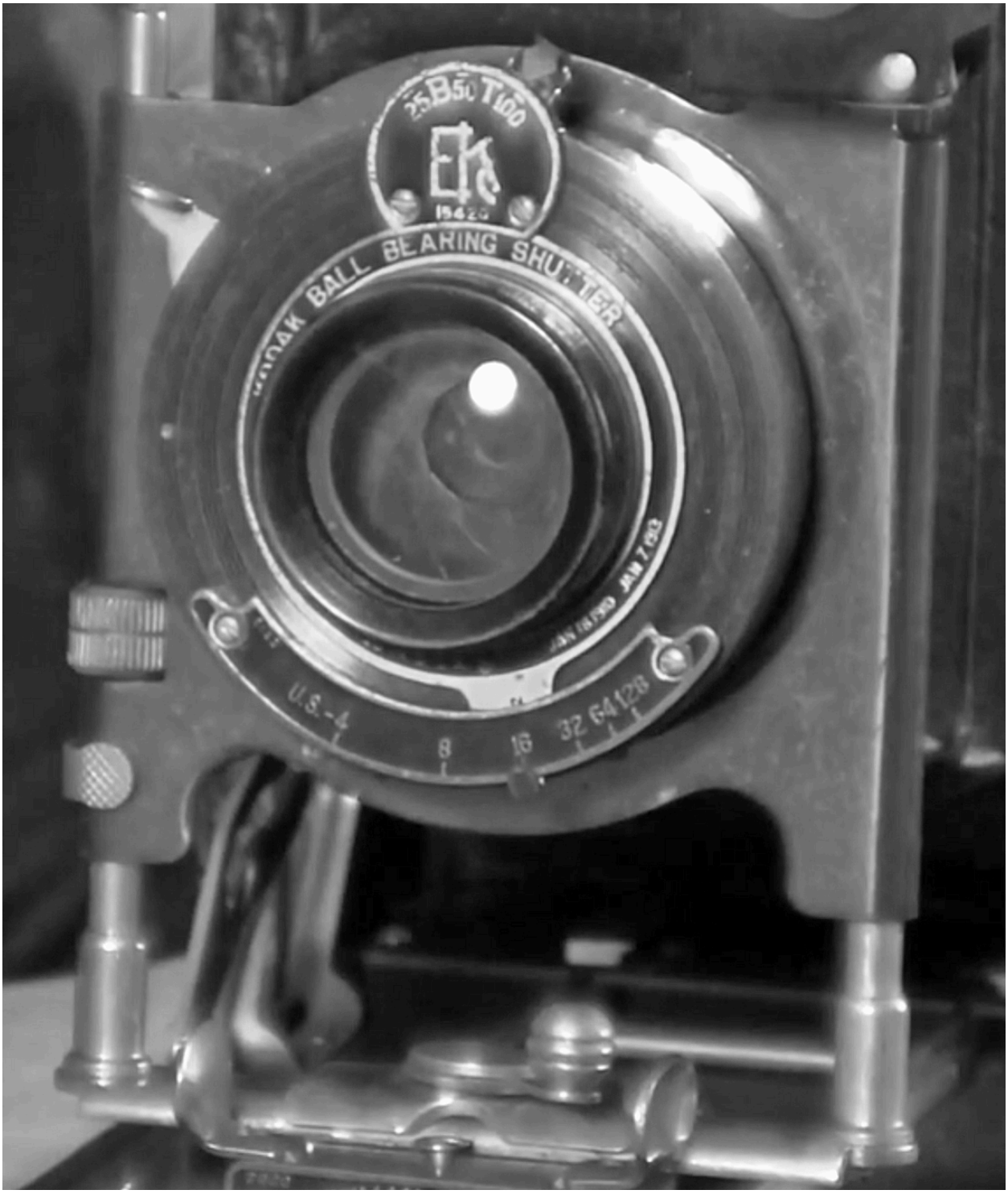
Add note

ITEM PRICE:
US $39.95

$45.90, not bad. It was had on EBay. It is now January 7, 2016

The camera was out of focus on the scale as I found after shooting. The photos are not in focus. Ground glass corrected that later. See a little about that in a video. A finer ground glass needs to be made for it.

122-6.jpg This is a scan and positive made with the computer.



4 = f8, 8 = f11, 16 = f16, 32 = f22, 64 = f32, 128 = f45

I'd like to cut some sheet film negative and tape it onto the old backing paper and shoot some new full sized images. Ilford sells 9cm film that fits.

A sheet of ground glass was used with the shutter on T so I could adjust the focusing scale. The focusing scale on the camera bed was moved so that infinity now is in focus.

The ground glass is too rough. I used the farthest trees that could be seen to focus infinity upon.

B or T can be used. I used a cable release to hold the lens open on B.

Other than that, it has three speeds: 1/25, 1/50, & 1/100.

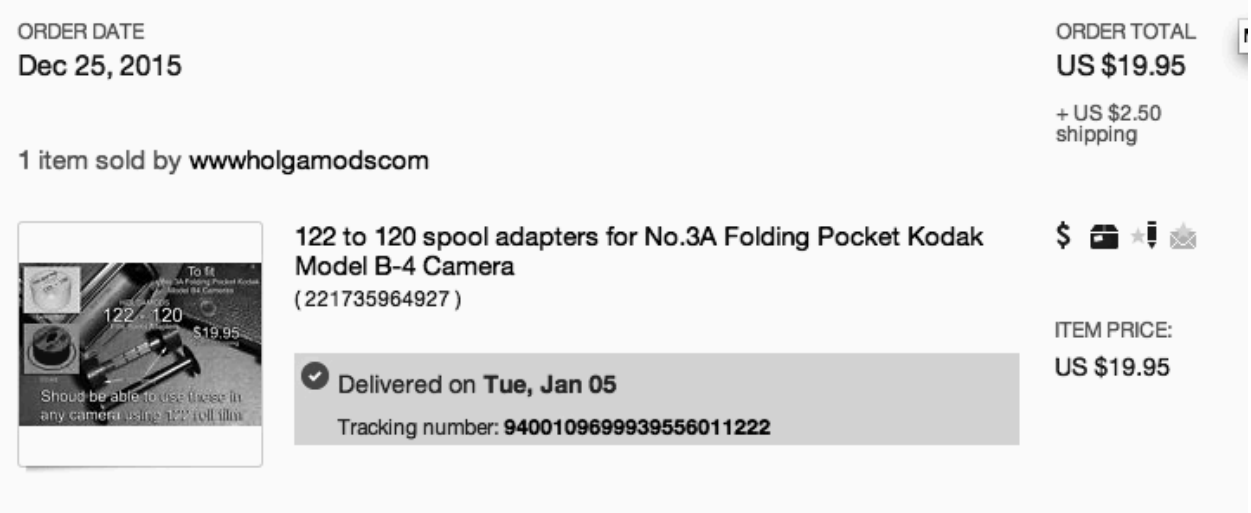
The T setting will keep the shutter open so you can focus the camera.

In my initial video I said that there was no little foot to hold the camera upright when in a horizontal position. That is incorrect. There is a little foot. It is on the left side facing the camera, next to the focusing scale.

Very important is the proper use of the locking mechanism located in the center under the lens. It is on the chrome sliding bar; it turns to lock the front standard when cranked to the left. Positioned straight ahead, the front becomes loose. That is so it can be slid left or right for camera movements. When it is straight out, if you pull it down the front rocks back and forth, putting the camera out of and into focus. Turn it clockwise to the left to lock focus and movements. I keep it loose to put away, as seen on p15.

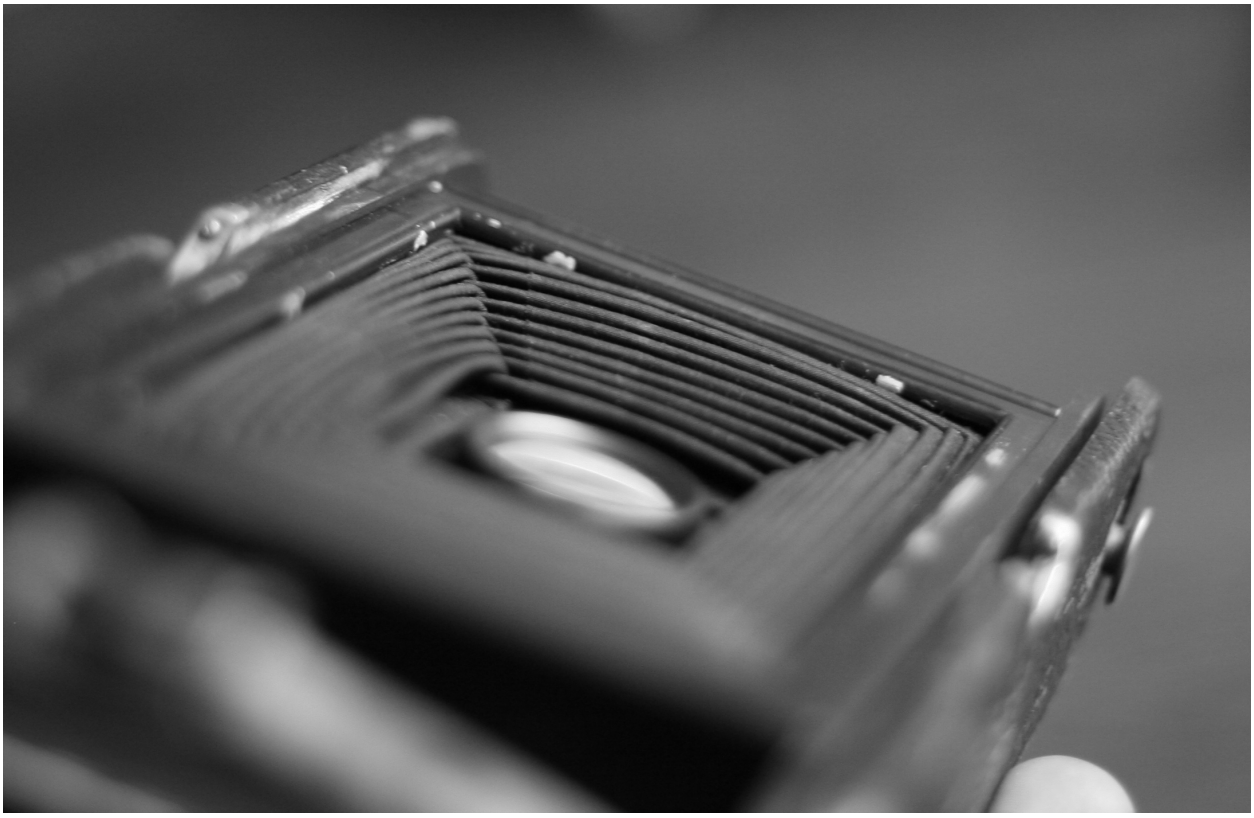
The viewfinder turns sideways clockwise. Looking down into the finder, holding the camera horizontally, the picture will be upside down on ground glass in the back. The top will be at the bottom. This is the side the red window is on. The back only goes on one way. A camera used in the linked video has the window the other way round. Mine is the Autographic model and has the big door near the strap end of the body.

120 film may be used in this camera. Spool adaptors were purchased so that smaller spools will fit the 122 size opening. I bought both 70mm to 122 and 120 to 122 adaptors and both have arrived, although only one is listed.



120 film may be threaded in the center or along one edge. Stack the adaptors both on one end if you want to use the number viewing red window. In that way one side of the film will ride on the rail in the camera.

Film numbers will be visible in the window. Only about half of the space is covered with 120 film so proper framing is essential. The viewfinder makes the image right side up, but only the top portion will be recorded using 120 film threaded along the side the red window is on. 120 film by Arista EDU 100 will be used in this Kodak 3-A camera threaded along one edge. Use numbers as follows: 3, 6, 9, 12, & 15 as seen in the little red window on the back of the camera. Film on the roll ends after 16.



Wooden dowels were cut to fit snuggly inside the opening in the back of the camera. There are marks inside the back where the black paint was removed that indicate someone else had also done something similar. One rod may be added to hold up the inside edge of 120 film threaded along the edge of the opening. Two may be used if film is threaded in the center of the space. However, if that is the case then winding turnings must be counted as the numbers will no longer be visible through the red window.

Dummy rolls of backing paper are needed to prove these methods. Film is also needed if you will roll the film in the center. The diameter of the wound film will pull more and more film per wind as it increases so the number of

windings constantly changes as it progresses. An actual strip of film will be needed behind the backing paper to make a proper fit.

Arista EDU 100 (shown) and 400TX were used in the center and windings were counted. The big arrow that goes sideways all the way across the width of the backing paper was lined up under the Autographic window. No film is behind the paper there.

Starting from the arrow, using 400TX, wind 5 3/4 turns to the 1st frame to expose, then wind 3 1/4 more to expose frame #2, wind 3+ a little or 3 1/8 to #3, then 2 1/2 to #4, then 2 1/2 more to #5, after that the film ends and you go to the end.

Starting from the arrow, using Arista EDU 100, wind 4 1/2 turns to the 1st frame to expose, then wind 3 1/8 more to expose frame #2, wind 2 5/8 to #3, and 2 5/8 again to #4, finally wind 2 1/2 to the last frame #5.

You should double check all that with film that you have.

120 to 122 spool adaptors, four, were provided to use two possible ways.

http://www.apug.org/forums/forum51/147353-kodak-3a-rapid-rectilinear-vs-anastigmat-lens.html

http://www.apug.org/forums/forum51/147134-kodak-folding-3-a-2.html

Here are two good threads about this camera and lens.

and here are threads and videos about spool adaptors for 616/116 to 120

https://www.youtube.com/watch?v=n5lUl-49Iao

http://www.taiabati.com/camerhack/shop/adapters/fak-616-film-adapter-from-120-to-616/

6 x 6 Cameras

Brownie Kodak Hawkeye Camera

https://youtu.be/1E6ixVlGCik https://youtu.be/CDufVnvurKs https://youtu.be/VUYAW19fOOY

This is my first of this type. No serial number is in it so it may become difficult to tell them apart. Another was ordered. This one had to have repair done to the Bakelite inside the back portion, on the top left of the front. Following the instructions on the web, I totally fixed this thing. The outside was cleaned best using Windex. It got rid of all the brown stains. Do not use Barkeeper's Friend until after the metal has been removed. White dust gets all in and around things. It came out easily enough when I opened it all up. Rusty metal inside was rubbed with Flat Black Enamel paint using my finger for indented parts around wheels and a pallet knife for flat parts. Sanding was not needed. The patch was made using Quick Steel, a product had in a auto parts store. A video was made. The two screws inside by the lens were removed. There was something inside the shutter part that was rattling around or I would not have attempted it. As it turned out, the Bakelite had broken on the support rail for the left screw. It must have been put in too tightly and broke the plastic into two parts. Liquid Plastic cement in a bottle was used with two coats. First the two parts were joined on the table. Then both inside the camera and the two parts were painted and put together using needle nose pliers. The screws in front were next. The metal did have to be pried up top and bottom but it worked and I got it all back together. There is white hard

putty around the lens. I only dusted off the front surface mirror. Windex cleaned everything else nicely. It LIVES!

http://www.apug.org/forum/index.php?threads/anyone-shoot-with-a-brownie.38744/

I, too, own a brand-spanking new (or so it looks!) Brownie Hawkeye. The original pre-flash version. Came with the original yellow Kodak box and a receipt for $5.50. But I beg to differ. Adjustments ***can*** be made to it. After a complete disassembly and cleaning, I made the following:

* Measured the true f/stop value for the little fixed meniscus lens and the true shutter speed using a Calumet Shutter Tester. Came to almost exactly f/11 and about 1/40th of a second. A bit slow for anything moving (sometimes including me, unfortunately).

* Using a tiny piece of appropriately curved black photographic tape, I masked off just enough of the rotary shutter blade opening to give me a measured 1/250th second at f/11. Much nicer.

* Cut a small square from an extra Kodak Wratten #8 (yellow) gelatin filter and during reassembly placed it immediately behind the small internal square of glass that covers the lens. Normally there's about a 1-stop correction required for this filter.

Since my tested and standardized EI for 120 HP5+ is 250, the overall net effect of these adjustments is that the camera is now a perfect-exposure machine for Sunny-16 days. And the now high-speed shutter means subjects are no longer motion-blurred. And the little monochrome filter works wonders to sharpen up the B&W images, as well as give me nicely rendered blue skies.

And, yes, believe it or not, I have been asked - more than once - what kind of digital camera it is...

Ken

https://youtu.be/g4M8o4tHyPc

https://www.youtube.com/watch?v=g4M8o4tHyPc&feature=youtu.be

https://youtu.be/2bewcoRI0bs Fiber Paper print

I fixed a few camera bodies and made videos about how it was done on my YouTube.

https://youtu.be/1E6ixVlGCik

https://youtu.be/7bNI0z89iHE

https://youtu.be/2bewcoRI0bs

Pentax 6x7 Cameras

FLASH

The camera alone is capable of shooting flash with the wooden handle and the flash on it when set on the “X” shutter speed setting (1/30). Here it is shown with a 2x teleconverter and a 90 mm Leaf Shutter lens added. So that is one book for the camera, one for the flash, and one for the lens.

The leaf shutter lens lets you sync the flash at speeds higher than 1/30 sec. The lens has settings of 1/30, 60, 125, 250, & 500th of a second.

That leaf shutter lens lets you shoot double exposures.

That lens lets you bypass the mirror up feature to improve stability of shots. The leaf shutter completely eliminates any vibrations.

That lens is also able to be used without any flash features just like a normal lens.

Read the instructions that came with the flash attachment. If you can read them, that is. They are in gray ink and very small. So I printed them large. They will be put in this document starting on the next page.

I used the flash last year, shooting 35mm film in the Minolta. Not much was written about it.

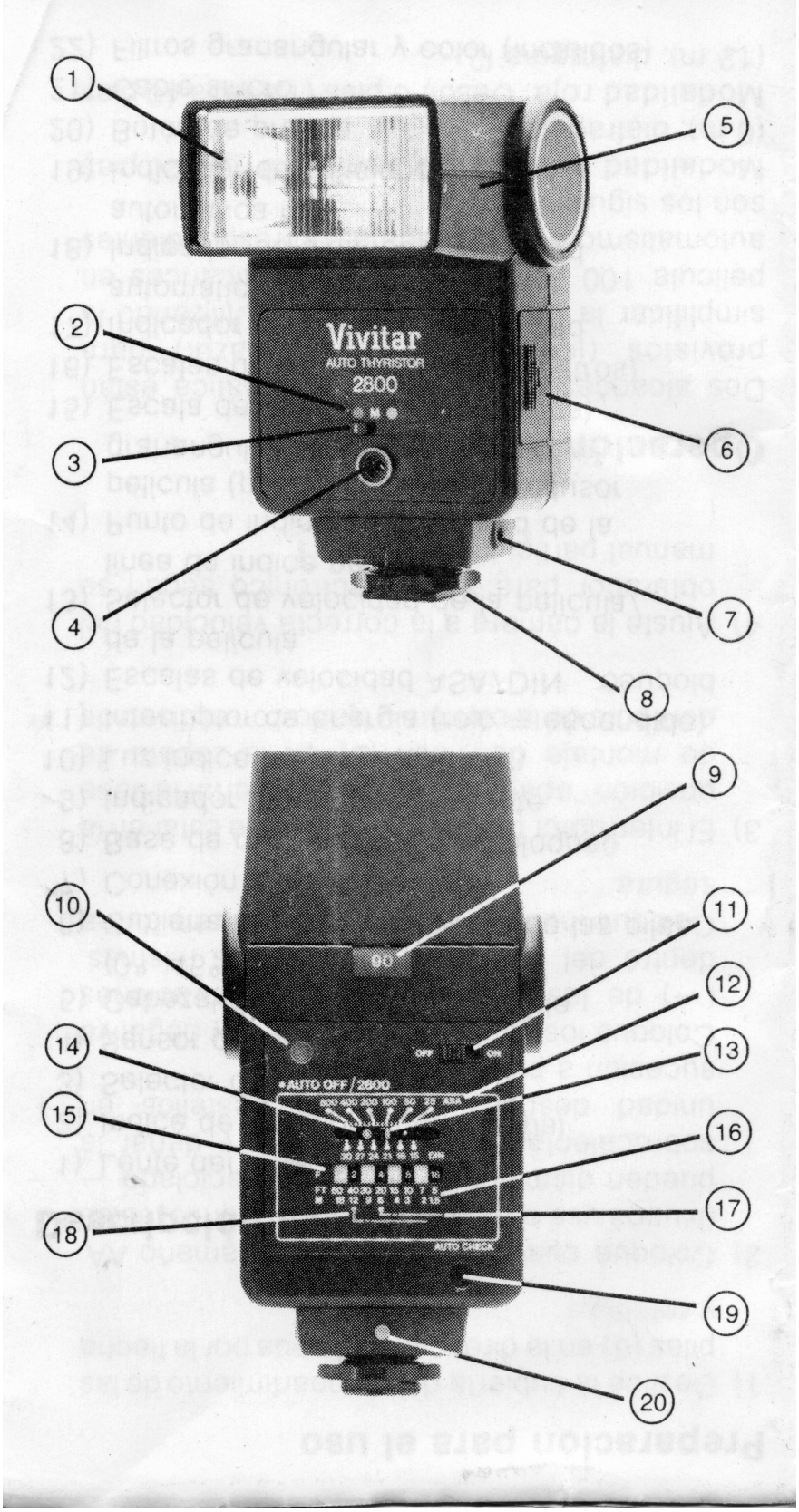
Now I've started using that flash with the Pentax 6x7. I used it with the camera all by itself.

The camera manual is mostly about flash bulbs regarding flash synchronization. It is on page 27. It just says to use the "X" terminal to plug an electronic flash into and to set the shutter on "X" also.

Nevertheless I've gotten good photographs already using the Pentax 6x7 and my old Vivitar 2800 flash. A panoramic converter kit to 35mm was used and some old 400 T-Max 24 exposure film. 10 1/4 developed.

37-9 bounce flash, 45mm, M, 16', f8, 60 degrees flash, no panel?

Flash Booklet



Description of controls

1) Flash panel
2) Auto/manual mode index
3) Mode setting switch
4) Light sensor
5) Adjustable bounce head (0°, 45°, 60° 75° and 90°)
6) Battery compartment cover
7) PC cord socket
8) Mounting foot/locking wheel
9) Bounce angle indicator
10) Flash ready light
11) Power on/off switch (red = "On")
12) ASA/DIN film speed scales
13) Film speed selector/normal index line
14) Film speed index dot (use with 35mm wide angle panel only)
15) Aperture (f-stop) scale
16) Distance scales (feet and meters)
17) Blue auto range indicator line
18) Red auto range indicator line
19) Auto check indicator
20) Open flash button
21) Wide angle and color panels (included)

Preparation for use

1) Slide battery compartment cover (6) in direction of arrow and remove.
2) Install four "AA" **alkaline** batteries (never use Nickel-Cadmium batteries — they can decrease recycle time (overheating circuitry) and damage the unit after five continuous full power flashes).

Make certain positive (+) and negative (—) battery symbols match the illustrations inside battery compartment. Replace cover securely.

3) Power switch (11) **must** be in the "off" position **before** inserting flash mounting foot (8) in your camera's hot shoe and locking it in place with the thumbwheel.

4) Set camera to correct shutter speed for electronic flash per your camera owner's manual.

Automatic operation

Two automatic operating ranges are provided (Red and Blue settings) to simplify flash photography. Using ASA 100/DIN 21 film, auto ranges/aperture settings are:

Blue Auto Range: From 3 feet (0.9 m) to 20 feet (6 m). Aperture setting: f4.

Red Auto Range: From 6 feet (1.8 m) to 40 feet (12 m). Aperture setting: f2.

Correctly lighted pictures may be taken at *any* distance *within* either auto range *without changing the aperture setting.*

NOTE: Auto range settings are directly related to the film speed being used, i.e. the faster the film speed, the smaller the f-stop setting will be.

1) Slide the film speed selector (13) along the scales (12) until the normal index mark (vertical line*) aligns with the ASA/DIN film speed you are using.
*If you have the 35mm wide angle panel mounted, align the index dot (14) with the film speed.

2) Focus camera lens on subject, check the distance and select auto range.

3) Read available f-stop settings from the scale (15) directly above the verticals of the blue (17) and the red (18) auto indicator lines. Select and set preferred f-stop on camera lens.

4) Ensure subject is within the minimum/ maximum distance of the auto range selected by reading the distance scales (16) directly above both ends of the auto range indicator lines. You may also use the auto check indicator (19) described in step 7 following.

5) Move the mode setting switch (3) to selected auto setting (blue right, red left)

6) Turn the power switch (11) to the red "on" position. When the flash ready light (10) glows, picture can be taken. Never shoot until flash ready light is on, or incorrect exposure will result.

   NOTE: Once the flash ready light is on, and as long as it remains on, the flash will operate to provide a correct exposure and reactivate the charging circuit automatically. Once the flash ready light goes out, the flash will still fire, but incorrect exposure may result.
   To reactivate the unit and obtain a ready light prior to releasing camera shutter, turn power switch off, then back on again. When flash ready light glows you are ready to shoot.
   The light sensor (4) controls light output automatically and ensures correct exposure at all distances within the auto ranges.

7) The auto check indicator (19) confirms that your subject is within selected auto range and will be correctly lighted. To operate, aim flash at key subject and press the open flash button (20) while watching the auto check

indicator. The auto check will flash green if the subject is within the auto range. If no green flash is seen, adjust your flash-to-subject distance.

Bounce flash in auto modes

The adjustable bounce head permits special lighting effects to be accomplished by "bouncing" light onto the subject from a ceiling or similar reflective surface. Your flash unit has click-stop settings at 0°, 45°, 60° and 90° (9) and may be used in either blue or red auto mode, following the preceding instructions with one important exception: the calculation of flash-to-subject distance.

In order to correctly expose bounce flash subjects, it is necessary to calculate the distance from the flash to the reflective (bounce) point, then to the subject. The total distance must not exceed the maximum distance fo the auto range being used. The auto check indicator described in step 7 may still be used in all bounce positions.

Manual operation

Flash photography beyond the scope of the two auto ranges is accomplished by switching to the manual ("M") mode.

1) Set film speed as described under auto operation, step 1.
2) Center mode setting switch (3) under "M" on the mode index (2).
3) Focus camera lens on subject, note the distance and find corresponding distance on flash scales (16)
4) Set lens aperture to the setting shown on the

f-stop scale (15) directly above noted flash-to-subject distance.

NOTE: Aperture settings may also be calculated mathematically by dividing the flash-to-subject distance into the flash guide number (80 for feet or 24 for meters, using ASA 100/DIN 21 film — varies with different film speeds). Example: With a guide number of 80 (24) and a flash-to-subject distance of 10 feet (3 meters), the correct aperture setting would be f8.

5) Turn the power switch to the red "on" position, wait for the flash ready light to glow, and shoot.

6) If you are using the bounce flash feature, calculate flash to reflective (bounce) point to subject distance as previously described, and determine the correct aperture, using the distance and f-stop scales.

Filter	General Effect
Red	Produces red-colored flash illumination
Blue	Produces blue-colored flash illumination
Yellow	Produces yellow-colored flash illumination
85-B	A warming filter which converts flash illumination for use with Typ (tungsten) color films — no chan in ASA/DIN film speed

Use of color filters

The following information is provided as a guide **only**. Specific data may vary as you adapt filtered-flash to your creative style.

	Exposure Compensation Guide	
	Manual	
	Open lens 2 f-stop Open lens 2 f-stop Open lens 1 f-stop Open lens 1 f-stop	

Specifications

Guide number:
ASA 100/feet: 80 (56 with wide angle panel)
DIN 21/meters: 24 (17 with wide angle panel)

Flash duration: 1/2000th to 1/30,000th sec

Auto range (Blue mode):
3.0 to 20 ft. (3.0 to 14 ft. with wide angle panel)
(0.9 to 6.1 m / 0.9 to 4.3 m with wide angle panel)

Auto range (Red mode):
6.0 to 40 ft. (4.5 to 28 ft. with wide angle panel)
(1.8 to 12.2 m / 1.4 to 8.5 m with wide angle panel)

Sensor measuring angle: 10° and 30°

Recycle time (four "AA" alkaline batteries:
0.5 to 5.0 seconds

Number of flashes: 450 approx.

Angle of coverage: 46° (H) x 34° (V)
(60° x 45° with wide angle panel)

Vertical bounce angles: 0°, 45°
60°, 75° and 90°

Auto circuit: Thyristor

Color temperature: 6000° Kelvin

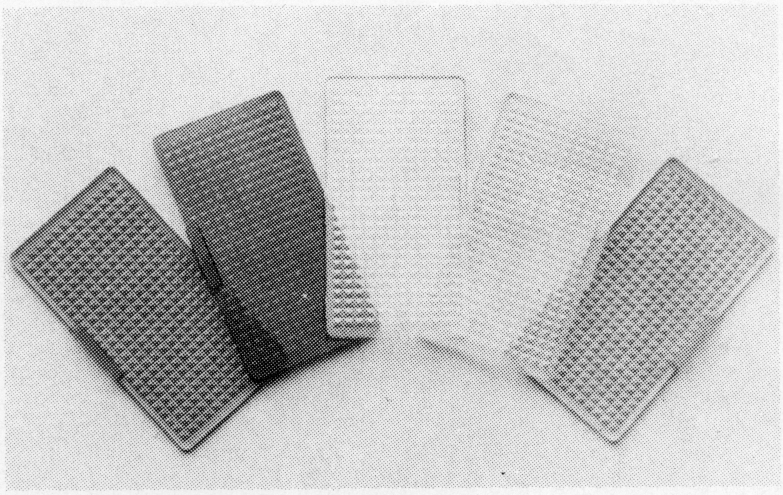
Open flash button

Auto check circuit

Auto off circuit

Accessories included:

Wide angle panel (35 mm)
Red, blue, yellow and 85B
wide angle filters



90mm LS Booklet

DESCRIPTION OF PARTS

1. Aperture Scale
2. Depth-of-field Scale
3. Flash Terminal
4. Cable Release Socket
5. Shutter Speed Ring
6. Focusing Distance/Aperture Index
7. Depth-of-field Preview Lever
8. Distance Scale
9. Lens Cocking Lever
10. U/S Lever (on back)

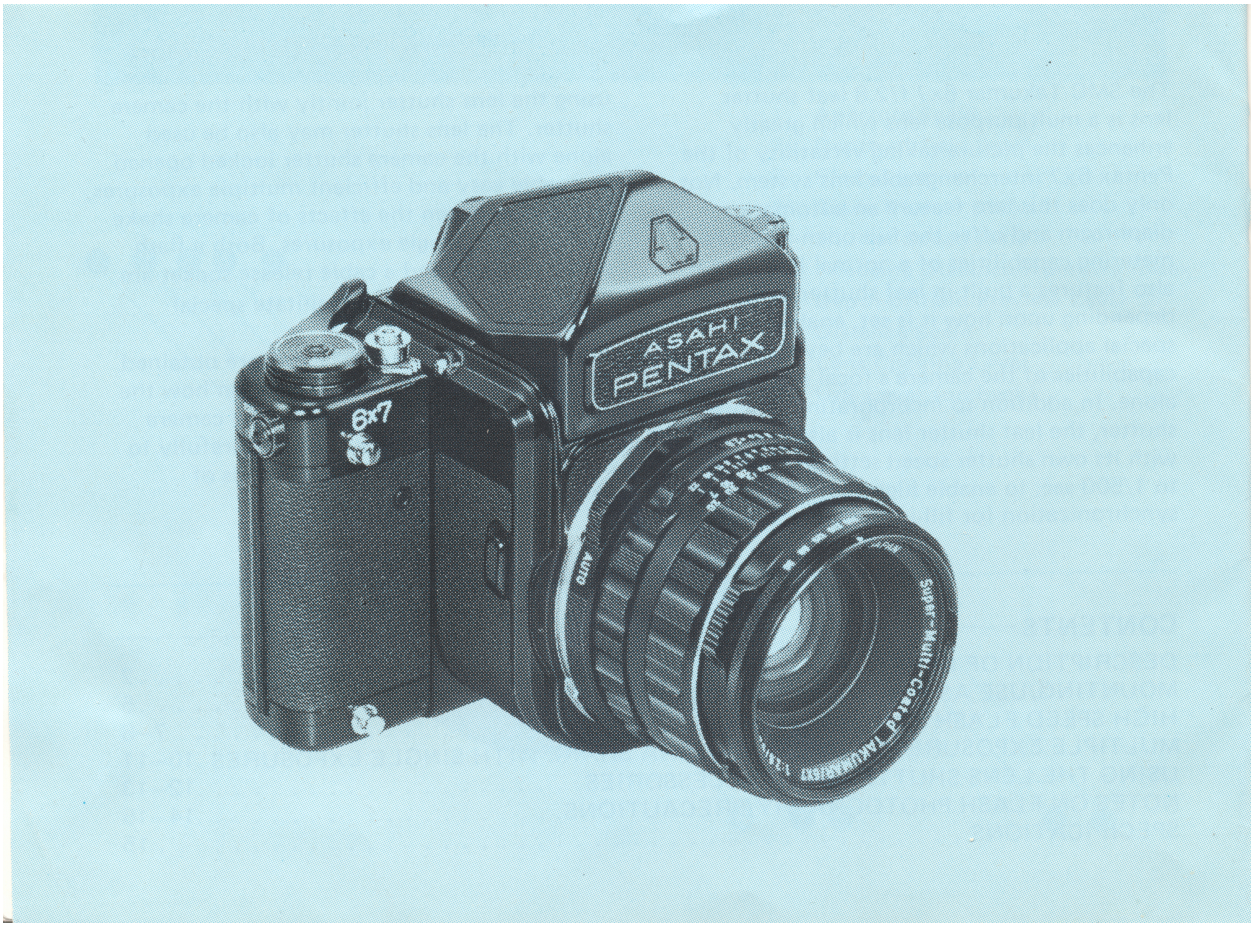
2

The SMC Takumar 6x7 f/2.8 leaf shutter lens is a multipurpose lens which greatly enhances the picture-taking versatility of the Pentax 6x7 interchangeable lens system. Not only does this lens feature an automatic diaphragm and offer the full open-aperture metering capabilities of a normal lens, but it also features a built-in leaf shutter, which, depending upon how it is set, enables various special applications which are beyond the capabilities of the camera's focal plane shutter alone. In addition to incorporating its own shutter, the leaf shutter lens is also provided with its own shutter speed settings from 1/30 to 1/500 sec. to enable high-speed flash synchronization for fill-in flash, etc., when using the lens shutter jointly with the camera shutter. The lens shutter may also be used alone with the camera shutter locked opened to enable easy and efficient multiple exposures, and also to lessen the effects of camera shake in the case of single exposures. Both a flash synch terminal and a cable release socket are provided on the lens to facilitate special applications.

Basically, the types of exposure obtained with the leaf shutter lens depend on how the lens shutter is set in relation to the camera shutter. Please read this booklet carefully to acquaint yourself with the methods of operating the lens.

CONTENTS

DESCRIPTION OF PARTS 2
MOUNTING/USE AS A NORMAL LENS 5
HIGH SPEED FLASH SYNCH (for fill-in flash, etc.) 7–8
MULTIPLE EXPOSURES/REDUCED CAMERA SHAKE WITH SINGLE EXPOSURES . 10–11
USING THE LENS SHUTTER WITH ACCESSORIES 12–13
NOTES ON FLASH PHOTOGRAPHY/PRECAUTIONS 14–15
SPECIFICATIONS 15


ASAHI
PENTAX
6x7
Super-Multi-Coated TAKUMAR

MOUNTING/USE AS A NORMAL LENS

When used without cocking the lens shutter, the SMC Takumar 6x7 90mm lens functions in the same manner as any other fully automatic diaphragm SMC TAKUMAR or SMC PENTAX lens. The angle of view produced by its 90mm focal length is slightly less than that obtained with a 50mm lens in the 35mm format, which places it in the standard lens category. A quick bayonet mounting system has been employed that enables mounting the lens to the inner mount of the Pentax 6x7 camera; and fully automatic diaphragm action assures bright, full aperture focusing.

Lens Mounting: To mount the lens, simply align the red diamond-shaped aperture index on the lens with the red dot on the camera body and insert the tabs of the lens mount inside the camera's inner bayonet mount. Then, twist the lens clockwise until it locks into place. To remove the lens, depress the bayonet lock lever and twist the lens counterclockwise, until it releases from the bayonet.

Use as a Normal Lens: After mounting, simply focus, set the lens aperture as with other 6x7 lenses and release the camera shutter to take the picture.

Note: The position of the lens' U/S lever does not matter when the lens shutter is not being used.

ASAHI
PENTAX
6x7
SUPER-Multi-Coated TAKUMAR/6X 1:3.5/90
6

HIGH SPEED FLASH SYNCH FOR FILL-IN FLASH, ETC.

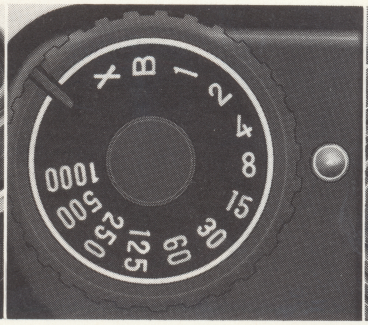
(Using the lens shutter and the camera shutter jointly)

When the lens shutter is used jointly with the camera's focal plane shutter, the leaf shutter lens enables high speed electronic flash synch between 1/30 and 1/500 sec., a must for outdoor portraits requiring fill-in flash, etc. In addition, flash bulbs may also be used with the lens shutter (refer to page 14). The procedure for using the lens shutter to provide flash synch is as follows.

1. Set the lens' U/S lever to U (Usual). **Photo 1.**
2. Set the camera shutter to a speed of 1/8 sec. or slower (so that its operation does not interfere with that of the lens shutter). **Photo 2.**
3. When using electronic flash or flash bulbs, plug the flash synch cord into the lens' Flash Terminal. **Photo 3.**

1

2

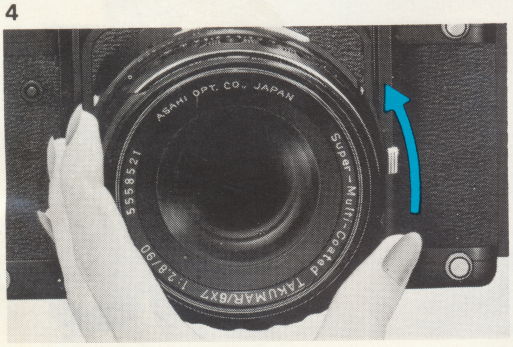


3

7

4. Set the shutter speed of the lens shutter by adjusting the lens' shutter speed ring. Also, set the lens aperture and cock the lens shutter by winding the cocking lever fully in the direction of the arrow. **Photo 4.**
5. Advance the film and focus.
6 Compose the picture and release the camera shutter button.
(The above steps 1 — 5 may be performed in random order.)

4

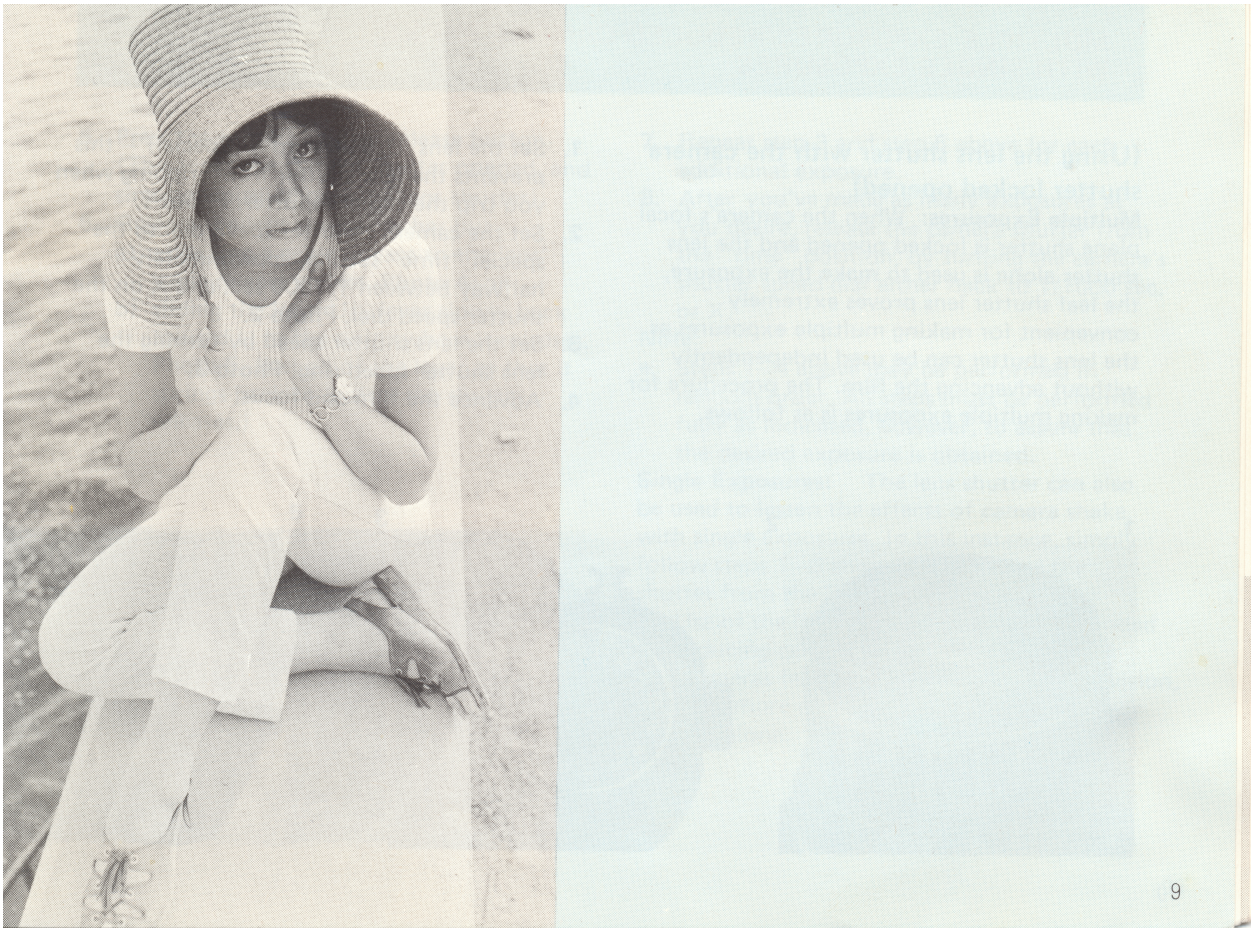


Notes:

- When making repeated exposures in the above mode with the lens shutter, only steps 4 — 6 need be repeated for subsequent exposures.
- If you neglect to cock the lens shutter, exposure will be made at the speed the camera shutter is set to.
- Do not neglect to set the U/S lever to U, or complete exposure will not be made.

Cameras with Mirror Lock-Up Provision:
Do not use the mirror lock up lever when shooting in this mode. This will result in premature tripping of the lens' shutter and ruin the exposure.

8



MULTIPLE EXPOSURES/REDUCED CAMERA SHAKE WITH SINGLE EXPOSURES

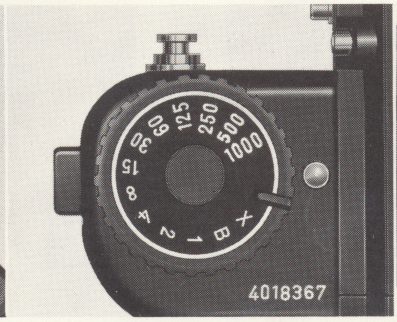
(Using the lens shutter with the camera shutter locked opened)

Multiple Exposures: When the camera's focal plane shutter is locked opened and the lens shutter alone is used to make the exposure, the leaf shutter lens proves extremely convenient for making multiple exposures as the lens shutter can be used independently without advancing the film. The procedure for making multiple exposures is as follows.

1. Set the lens' U/S lever to S (Special) — this prevents the lens shutter from tripping when you trip the camera shutter. **Photo 1.**
2. Set the camera's shutter speed dial to the special "time" setting, approximately halfway between 1/1000 sec. and X on the shutter speed dial. **Photo 2.**
3. Set the lens shutter speed by turning the lens shutter speed ring. **Photo 3.**
4. Advance the film and focus.

1

2



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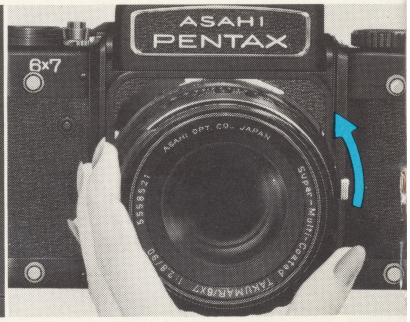
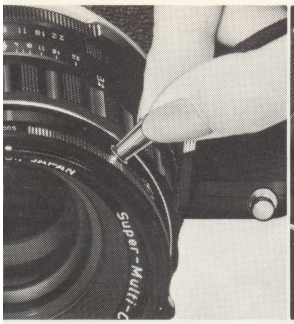


10

5. Press the camera shutter release button. (This locks the camera shutter opened, and simultaneously closes the lens shutter).
6. Release the lens shutter either by:
   a) attaching a cable release to the lens' cable release socket, **Photo 4**; or
   b) sliding the lens' U/S lever slowly back toward U to the point where it releases. **Photo 5.** (Let go of the lever so that it springs back to S after the shutter releases.)

4



5

7. Repeat step 3 and step 6 above for each additional exposure.
8. After you've made as many exposures as you desire, release the camera shutter from the "time" position, by turning the camera's shutter speed dial either back to 1/1000 sec. or X.

Note:

- Steps 1—4 above may be performed in random order. All steps must be performed fully as indicated, however, to assure that the desired exposure is obtained.

Single Exposures: The lens shutter can also be used to lessen the effects of camera shake with single exposures. In this instance, simply follow steps 1—6 above; then, release the shutter from the "time" position.

Use of the lens shutter is also recommended for reducing camera shake even with Pentax 6x7 cameras featuring a mirror lock-up provision, as this is more effective than use of the mirror lock-up alone.

11

USING THE LENS SHUTTER WITH ACCESSORIES

Auto Extension Tubes: With both types of shooting, Auto Extensions Tubes nos. 1, 2 and 3 may be synchronized for close-up shooting with the lens shutter if used independently. Joint use of the extension tubes is not recommended, however, as they will not synchronize properly.

12

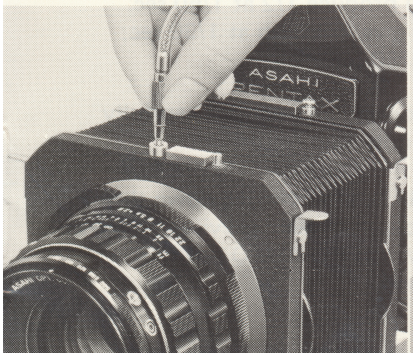
Auto Bellows

When the auto bellows is used, joint use of the lens shutter and the camera shutter is not recommended as proper synchronization is difficult to obtain. However, the auto bellows and the lens shutter can be used together with the camera shutter locked open. The procedure is as follows.

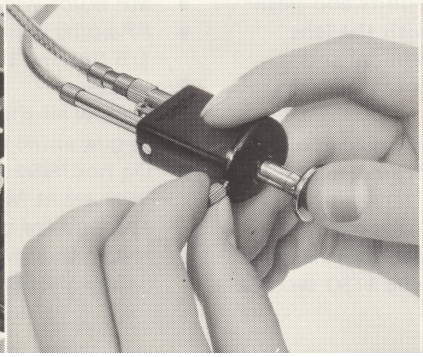
1. Attach both the camera and the leaf shutter lens to the Auto Bellows Unit.
2. Screw the end of the double cable release with the red ringed tip into the bellows' cable release socket. **Photo 1.** Leave the other end hang free.
3. Ready the lens and the camera shutter as indicated in steps 1—4 on pages 10 and 11.
4. Depress the double cable release button and lock it by tightening the locking screw. **Photo 2.** (This closes the lens' shutter.)
5. Next, press the camera shutter button to lock the camera shutter opened.
6. Complete the exposure as indicated in steps 6 and 8 on page 11.

- After tripping the lens shutter, do not release the stopper screw of the double cable release until after you have closed the camera shutter.

1



2



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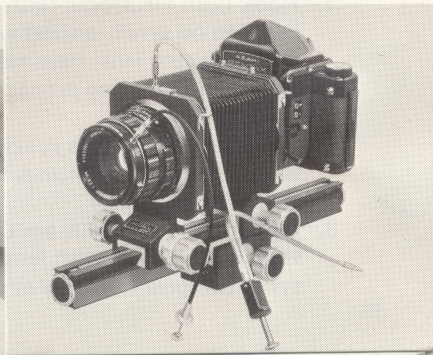
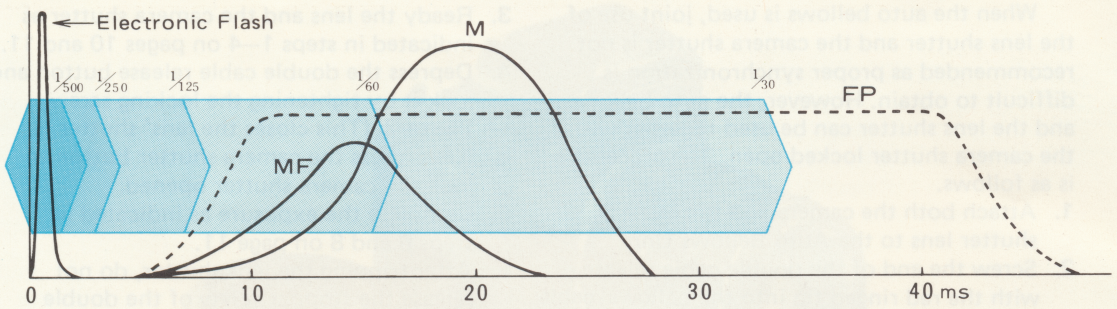


NOTES ON FLASH PHOTOGRAPHY/PRECAUTIONS



• Graph comparing flash synch characteristics of electronic flash, MF and M flash bulbs in relation to shutter speeds and shutter movement in milliseconds using the lens shutter.

Flash Photography

1. Hook both electronic flash units and flash bulbs to be synchronized with the lens shutter to the lens' flash terminal and follow the shooting procedure indicated on pages 7 and 8.
2. Electronic flash units synchronize at all lens shutter speed settings from 1/30 sec. to 1/500 sec.
3. MF and M flash bulbs are the most suitable flash bulbs to use with lens shutter. Both types will give full flash at the 1/30 second shutter speed setting.

- MF bulbs will produce 1/2 at 1/60 sec.
- FP bulbs will give 2/3 flash at 1/30 sec; 1/5 flash at 1/60 sec.

Precatuions:

- Follow all shooting instructions carefully to guarantee optimum results.
- Do not leave the depth-of-field preview lever set at MAN. after closing down the aperture for depth-of-field preview. Always return the lever to the AUTO position before shooting.

14

SPECIFICATIONS

Lens mount:	Pentax 6x7 inner bayonet
Construction:	6 elements in 5 groups
Angle of View:	52.5°
Shutter:	Copal "C" special SLR shutter
Speeds:	1/30 sec. — 1/500 sec.
Diaphragm:	Fully automatic (f/2.8 — f/22)
Focusing:	0.85m (2.75 feet) to infinity
Flash:	Built-in X flash terminal
Filter Size:	Accepts 67mm bayonet filters
Other Features:	Cable release socket, depth-of-field preview lever, shutter cocking lever
Size:	91.5mm max. dia. x 62mm length (excluding mount)
Weight:	610 grams

ASAHI OPTICAL CO., LTD. C.P.O. 895, Tokyo 100-91, JAPAN
ASAHI OPTICAL EUROPE N.V. Weiveldlaan 3-5, 1930 Zaventem Zuid-7, BELGIUM
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1110 ROBSON STREET
VANCOUVER, B.C.
V6E 1B2

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5/79 Printed in Japan

What Was Done

On November 6, 2013 I shot digital photographs with a flash at the Center of the Arts. I guess it was the Canon flash. The files are in the 5D folder on LaClie hard drive but I never wrote about it. Oh well, do it again.

Rolls 37 & 38 were shot using the flash, but they were also shot using a 35mm panoramic converter kit for the Pentax 6x7 camera. Most of the shots have a hot spot because the flash was pointed right at the subject. Some of the shots were made using the Bounce Flash technique. Those shots do not have a hot spot in them.

37-9 Bounced flash @ 60 degrees, 45mm lens, M, 16', f8, no panel?

A new negative carrier was needed so prints could be made in the darkroom. I bought a 35mm one off ebay for 20 some dollars. It was drilled on the ends, hacksawed on the sides, bent over, broken off, filed smooth, spray painted with flat black, filed more, painted, filed more, and finally was good enough after spraying a little more flat paint on it.

Using a 90mm Rodenstock lens on the enlarger with the height at 24.35, with the condenser head at 2 1/4 x 2 3/4, the white border and the image area inside of it are, (I like that full frame look):

19 1/16 x 7 1/8 OD black border area, 18 7/8 x 6 13/16 ID image area. And of course I could always use the easel blades to get rid of the border completely leaving only white up to the image. 6 3/4 high x 18 3/4 long.

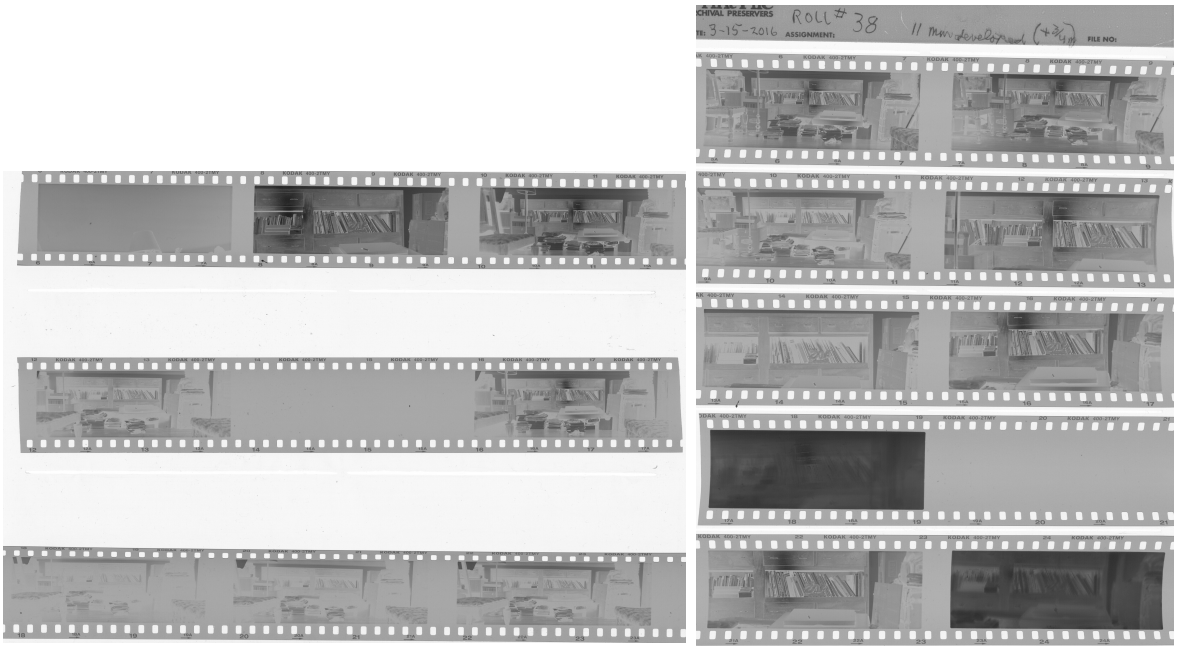
Bounce Flash Settings

37 #4 X, f4, Red, the focus check was used, bounced light off the ceiling at 90 degrees. No Hot Spot.

37 #7,8,9 Bracket, X, Manual, Bounce Flash at 60 degrees, a distance of 16' was measured using a tape. **7** was f11. **8** was f11-8. **9** was f8. No Hot Spots.

38 #3 X, M, f5.6, no panel, 60 deg,. no hot spot

38 #5 X, M, f5.6, no panel, 200 iso, 45 deg,20', Dragon with flashlight focus. No hot spot.



37 38

One thing I tried was to rate the film lower at 200 instead of 400. That gave me some more exposure. Another was to develop 38 longer to get darker negatives. That helped.

What Happened?

March 19, 2016. I don't really know. When I tried to use the flash everything went wrong. I forgot to cock the shutter. I forgot to turn on the flash. Then, the thing just didn't work. It shocked me once. Then it worked upstairs after I'd transferred the film to the other camera body. Then it didn't work anymore.

I thought the camera was bad. Then I realized that the camera didn't do anything. It must be the flash. So, I bought another flash with a sync cord off Amazon. They are all used. A few posts were made asking what flash to buy. B&H is closed, but I sent an email help request asking what flash would be best to buy for the Pentax 6x7 camera using an X sync cord.

We'll see.

The damn thing continues to work. I wasted an entire roll of film and only had one shot that the flash fired on.

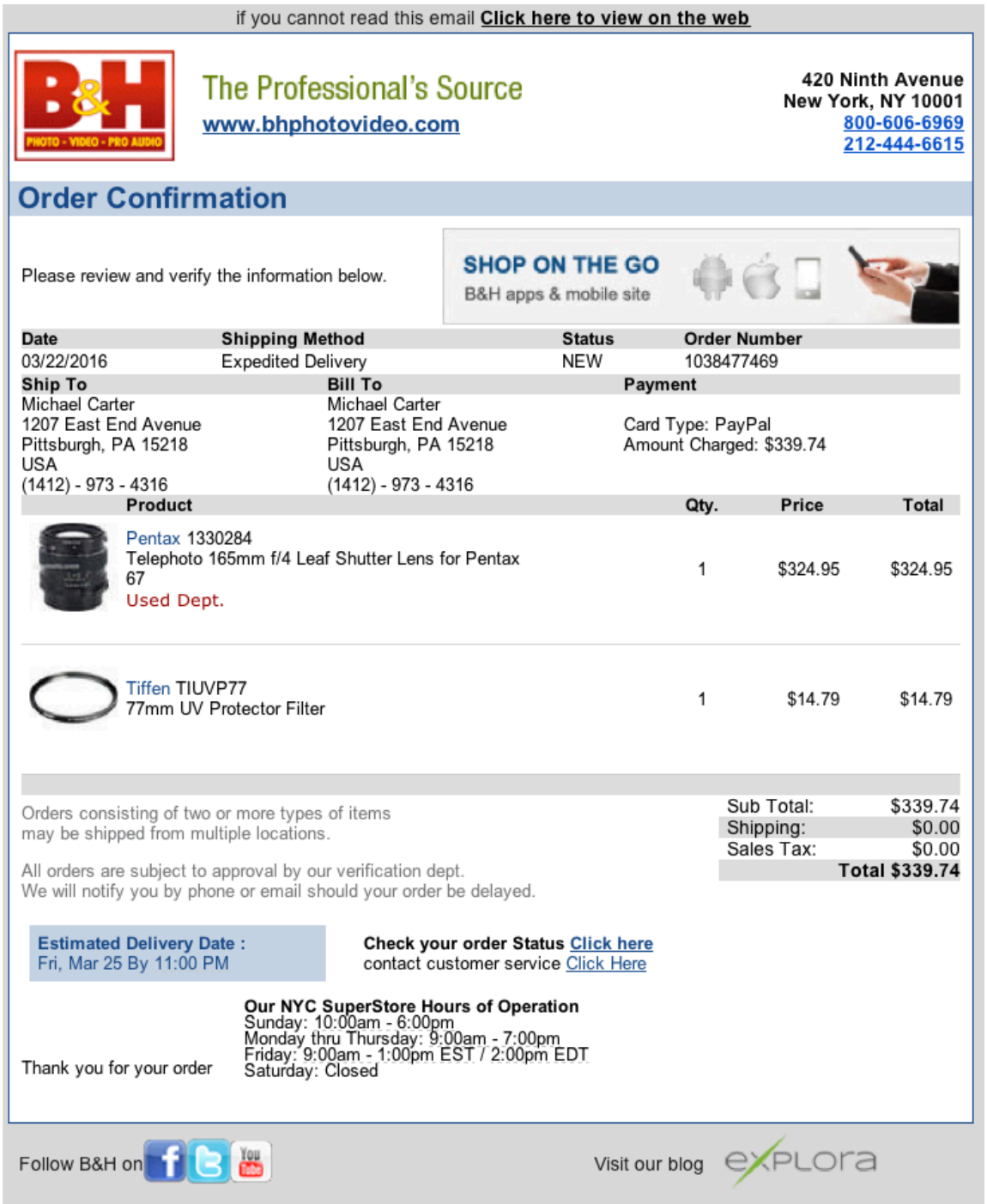
https://youtu.be/wHYwgCnDd1E

https://youtu.be/r6a9NtCoZd4

https://youtu.be/r6a9NtCoZd4

165mm LS

This lens was bought from B&H at $100 less than what was offered on ebay from Japan at the time plus free shipping. Then another lens was offered for less but I'd already bought this one.



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Date	Shipping Method	Status	Order Number
03/22/2016	Expedited Delivery	NEW	1038477469

Ship To	Bill To	Payment
Michael Carter 1207 East End Avenue Pittsburgh, PA 15218 USA (1412) - 973 - 4316	Michael Carter 1207 East End Avenue Pittsburgh, PA 15218 USA (1412) - 973 - 4316	Card Type: PayPal Amount Charged: $339.74

Product	Qty.	Price	Total
Pentax 1330284 Telephoto 165mm f/4 Leaf Shutter Lens for Pentax 67 Used Dept.	1	$324.95	$324.95
Tiffen TIUVP77 77mm UV Protector Filter	1	$14.79	$14.79

Orders consisting of two or more types of items may be shipped from multiple locations.

All orders are subject to approval by our verification dept.
We will notify you by phone or email should your order be delayed.

Sub Total:	$339.74
Shipping:	$0.00
Sales Tax:	$0.00
Total	**$339.74**

Estimated Delivery Date :
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Check your order Status Click here
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Thank you for your order

Our NYC SuperStore Hours of Operation
Sunday: 10:00am - 6:00pm
Monday thru Thursday: 9:00am - 7:00pm
Friday: 9:00am - 1:00pm EST / 2:00pm EDT
Saturday: Closed

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6x7 165mm LS lens.Check all functions for good working order. Will return lens with dot's matching up so the shutter unit will stay open to focus and meter.
I put the lens on a camera, looked through the back. Cocked the camera and lens on 1/8 sec. No exposure. I put the camera speed to 1/4 sec and there was an exposure every time. This is not right. So I looked at the lens firing the shutter several times and there is about an 8th of a second delay before the leaf shutter fires. Once you hit the lever on the back of the lens the shutter should fire instantly. I say there is something wrong with the LS. There should not be a delay.

I had cocked the lens to focus and the meter was not used since the Chimney Finder was; I did not match up the dots to do that.

Ahh, the lever on the back of the lens is that little tab I triggered. That is when the lens is off the camera.

It'll go back to B&H, maybe, the technician said that the lens worked every time at 4 or 1/4th of a second. I used it at 8 according to instructions. The shutter is sluggish. He also said that he would have to order a new shutter at a cost of $200. That'll be plus his labor to install it I suppose. It would be new then with a warranty.

I think that cheaper lenses are older and more worn and require slower camera shutter speeds to make them work properly.

The lens does work with a flash with the camera speed set at 1/4th of a second.

The lens does work with a flash when on the 2X teleconverter. The flash must be set to the line under 100 when using this combination and 400TX film.

HIGH SPEED FLASH SYNCH FOR FILL-IN FLASH, ETC.

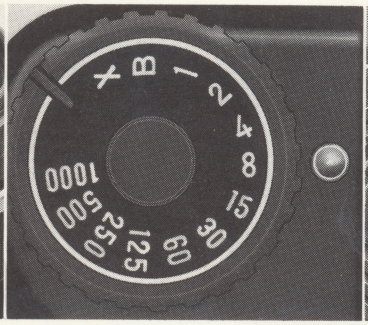
(Using the lens shutter and the camera shutter jointly)

When the lens shutter is used jointly with the camera's focal plane shutter, the leaf shutter lens enables high speed electronic flash synch between 1/30 and 1/500 sec., a must for outdoor portraits requiring fill-in flash, etc. In addition, flash bulbs may also be used with the lens shutter (refer to page 14). The procedure for using the lens shutter to provide flash synch is as follows.

1. Set the lens' U/S lever to U (Usual). **Photo 1.**
2. Set the camera shutter to a speed of 1/8 sec. or slower (so that its operation does not interfere with that of the lens shutter). **Photo 2.**
3. When using electronic flash or flash bulbs, plug the flash synch cord into the lens' Flash Terminal. **Photo 3.**

1

2



3

7

https://youtu.be/7AXU8jJbIrY

https://www.youtube.com/watch?v=7AXU8jJbIrY&feature=youtu.be

Flash Hookups

The Pentax 6x7 camera is hooked up to two flashes that are off the camera and on tripods or standing on their little foot apart from the camera. To do that an extension cord is used along with a little cube called a LumoPro. One extension cord came with a new flash that I bought. The cord has a PC socket on one end just like the one on the Vivitar 2800 flash. Only much longer. The other end has a 1/8th inch male plug. The new flash has a socket for this end. The LumoPro has two sockets, one is the PC and one is the 1/8. The extension cord from the camera or LS lens goes into the LumoPro and so does the flash.

Another LumoPro, two are in the kit, along with a very long 1/8 to 1/8 cord both male, is put under the first one. It has that hot shoe button so there is a connection made between the two and the camera. The long cord is plugged into the LumoPro on the bottom and into the new flash. Both will fire at the same time.

A little foot is put under the new flash. Another hot shoe adapter to PC plug, this one has a very short cord, is put under the lowest LumoPro because it has a 1/4 20 screw hole in it to put it onto a tripod. So does the little foot.

It is difficult to see if both flashes go off. Hold the 2800 close to your face and look between the two flashes and pop them off. I saw both many times. I could not video them going off.

http://mpex.com/lumopro-universal-hot-shoe-translator-kit.html

https://youtu.be/0bpo4rOF-14

300mm Lens

Roll 53 was shot with this lens hand held in July 2016. Look in the Contact Sheets folder.

400mm f4 “Baby Bear” kit

One roll of film has been shot with this lens so far, as of July 2016.

The 400mm f4 SMC Takumar is ready to carry. A 2X is at hand to make it 800mm. The 1.4 is on the way. This outfit will ensure stability as it was purchased after reading extensive reviews on Luminous Landscape about the 600mm lens. Just the camera went out this morning and I took two hand held shots to try it. 1/60 @ f32. It might work.

The wooden handle on the left can be used to trigger the shutter using a cable release as that handle adds a lot to stability, however, my left hand held the lens this morning. I figured it out later.

Moose Productions or something like that on YouTube showed how to carry gear like this so I got it all out. My brass and chrome tripod is really difficult to handle, but it works with the gadget connected to the camera body and leg of the tripod. There is a soft shoulder pad on one of the legs up top.

I am just getting started. Today I will try to put the gray 2x onto the camera with the 400 and a chimney finder. I have to practice putting these things together and taking them apart… this 400mm lens does not engage the

chain so the finders can be swapped with the lens on the camera. Only twist lenses need to have the lens taken off first. At least this one does not have that problem. It is good to know that I am not alone with all this stuff.

This outfit as is now weighs 20 pounds. That is a carbon fiber tripod otherwise it'd be more. This one is the Baby Bear, the Moma Bear is a 500mm f5.6, and the daddy bear is the 600mm f4. I'm getting out the big guns.

This is a video. Double click or pass over it. It is also on my YouTube channel called studiocarter1. But I put it here, compressed. The video shows how to attach and remove the 400mm lens to the Pentax 6x7 camera. This is different a little bit than that required to do the 600mm lens. That one needs a video as well.

Pentax Forums Review:

The 400/4 was one of the original lenses when Pentax introduced the 6x7 system in 1969. I have the third and last 1981 version (SMC Takumar 6x7 400/4) and it has the same optics as its predecessors and the full SMC coatings. The SMC Takumar 6x7 400/4 was replaced by the SMC Pentax-M* 67 400mm f/4 ED in 1986.

Usage:
The 6x7 400/4 features include a tripod mount, a manual diaphragm, a rear filter holder, a minimum aperture of f/45 and the older outer bayonet lens mount. The 6x7 400/4 weighs in at 2570g and is 287mm long. Compared to some other 6x7 telephotos the 6x7 400/4 is relatively light and small, however the lens still requires proper tripod support. Having to use stop-down metering and the outer bayonet mount are a bit of a pain, but you get used to both after a while.

CLOSE-UP WORK: These older 6x7 Takumar telephoto lenses all have a poor minimum focusing distance and the 6x7 400/4 is no exception (8.0 meters). If you want to get closer, you will need to use extension tubes. The 6x7 400/4 requires the use of the older “outer bayonet” extension tube set, which has only two tubes. This tube set is hard to find, but does work quite well. You can reduce the minimum focusing distance of the 6x7 400/4 down to 2.76 meters if you use both tubes.

REAR CONVERTERS: You can use the older T6-2X & 2X Outer Bayonet and the newer 1.4X & 2X rear converters with the 6x7 400/4. This will extend the focal length to 560mm or 800mm and makes the 6x7 400/4 quite versatile. Pentax suggests when using the newer converters you stop down the aperture to f/8 or smaller, to avoid light fall off at the corners when shooting at or near fully open. I have used both the newer 1.4X & 2X converters with my 6x7 400/4 and the results are quite good.

FILTER: The 6x7 400/4 uses 77mm screw in filters, or Pentax 6x7 77mm bayonet filters. Filters are attached to a removable adaptor ring, which screws into the rear of the lens.

CASE: The 6x7 400/4 comes with a dedicated hard lens case. The case also has a sturdy shoulder strap which makes it easy to carry the lens.

HOOD: The 6x7 400/4 has a built-in hood that extends. The front of the lens is protected by a hard leather lens cover lined with felt.

Summary:
If you want to get into the world of long telephoto lenses for the Pentax 6x7 system on a budget, the SMC Takumar 6x7 400/4 is the way to go. While it can’t compete with the newer Pentax 67 ED glass lenses optically, it’s equal or better than all the other older Takumar 6x7 telephotos in the 300mm to 1000mm focal range.

Price: I found my SMC Takumar 6x7 400/4 on eBay and it cost $630.00USD. It was EXC+ condition and came with the hard lens case, front lens cover & shoulder strap.

Read more at: http://www.pentaxforums.com/lensreviews/SMC-Pentax-Takumar-6x7-400mm-F4-Lens.html#ixzz4FdBXnLTr

Pentax Forum Review:

Overview and Optics

As far I have seen, there has been only one optical configuration of the 400 Takumar, although there was an early 400 with a narrower focusing grip. I've owned this lens since 1998 and continue to be impressed with it. Its cross section (optical) is very similar to the 300mm Takumar, with an APO triplet up front and a weak positive element and negative element in the rear. But the two lenses couldn't be more different in performance. The 400 has better contrast, better color rendition, better sharpness and has a better diaphragm. It also has a tripod mount, which the old 300 could have used. Yes, the 400 will color fringe a bit at f/4 in high contrast situations but no worse than the 300. The 400's 12 blade diaphragm is a masterpiece. It is perfectly round at f/45. I do not recommend the use of a rear filter on the 400 because they cause reflection which can show up on film. Even the use of a multi coated rear filter does not solve the problem. The 600 is not as bad as the 400 in this regard. **The front thread is 108mm and it is not possible to find this size filter unless custom made. I use a 105mm B+W polarizer and have it mounted inside a polycarbonate ring. This ring fits over the lens hood.** The dual knob focusing of the 600 was not employed on the 400. It should have been. The helical system is really slow; shots will be missed because of it.

Sharpness

This lens shot at f/8 and infinity is amazingly sharp. My estimate in lp/mm is 90-95. It can rival any lens in the P67 lineup, (although its color rendition is not quite as good as the 300EDIF). It is sharper than the 45mm. In a comparison of slides taken with the 400 and the 55-100 zoom, it is difficult to tell them apart. The 400 and 75 f/4.5 are the sharpest Takumars. This lens is susceptible to shutter vib but not nearly as much as the 600 mm. Shooting at 1/2 to 1/30 second is risky on a tripod.

Odds and Ends-- Technical Info

This lens can be shot handheld without too much problem. Its weight muffles the mirror and shutter vib and so it can be shot at 1/125 sec with little worry. Strangely enough, some bodies have trouble metering with this lens attached. Outer bay lenses have this inherant problem. Only two of my three bodies will meter with this lens. But, the lens is only party to blame. The machining of the body metering pin is not accurate. There is a reason why Pentax went with inner bay, for the newer telephotos. At first, the manual diaphragm of this lens sounds like a major problem but in actual use, it is not. This lens uses a locking lens hood
that can take a bit of getting used to. To fully extend it, one needs to get the hood into a channel by twisting, to move it forward and lock it. There are some 400 Takumars that have a free moving lens hood though.
The use of conventional glass in the Takumar, puts it at a disadvantage to the 400 EDIF. Even though the Takumar is probably APO, it cannot focus all colors at the film plane from all zones of the lens. It is APO in only one zone. Outside this zone, colors focus in

front or behind the film. This change in color focus by lens zone is known as spherochromatism. The marginal zone is always the worst and this is done by design. It allows the shooter to stop down to eliminate the poorly corrrected marginal colors. By f/8 the Takumar does well in color elimination. The 400 EDIF has some color aberrations as well, but the difference in color correction by lens zone is way less than the 400 Takumar. The EDIF has less spherochromatism than the Takumar but from f/8 to f/45 the color correction between the two is similar. Lateral color can be seen at the edges of the frame with the Takumar, on occasion, if there is very high contrast in the scene. The EDIF is better in this regard. I think 400 EDIF shooters would be surprised with the excellent performance of the 400 Takumar.

A comparison of the degree of color correction between the 400 and 600 Takumars shows a huge difference. The 400 is way superior to the 600 in regards to Longitudinal Chromatic aberration. The remedy for the 600 is stopping down.

Pentax's 1.4x rear converter will fit on this lens but I suggest stopping the lens down to at least f/6.7 to reduce color fringing possibilities. Oddly, the 400 with 1.4x (wide open = f/5.6) has less color fringing than the 600mm at f/5.6. Using the 1.4x and outer bay tubes on the 400 is a bit strange. The tubes must be put in front of the converter to fit correctly. This lens with the 1.4 yields 560mm focal length. The performance of this lens with the 1.4x is great- no degradation noticed. The use of the 1.4x will increase the susceptibility of this lens to shutter vib.

Overall, the 400mm Takumar is one of my favorite lenses for this system for reasons you have just read.

Read more at: http://www.pentaxforums.com/lensreviews/SMC-Pentax-Takumar-6x7-400mm-F4-Lens.html#ixzz4FdBwK4Yc

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Henrik Coelho: Me, personally, I have learned that for best sharpness, usually is around f11 (sometimes f16 or f8 depending on lens&subject) + MLU +Tripod +cable/self timer if you don't have one. So far I have never get better results using any other method! (except using only flash light!)

Me: There is a filter adapter ring inside the back of the lens. I left it in there without putting any filter in it. Later, I did try putting filters in it. A 77mm SMC Pentax bayonet filter will not allow the camera to be attached. A 77mm screw in filter will allow the camera to be attached, although not like it attaches without the filter in place.

The locking pin no longer works with a filter. The collar must be unscrewed way out to get the camera to go on. Then the collar must be screwed in without the camera being locked in place. The tube and foot must be aligned by eye to the camera body.

Install the filter holder upside down. Then the locking pin will engage normally. Also, the thicker bayonet mount filters will now fit. So will screw in circular polarizers.

Front lens has a 108mm thread, use it instead of the rear one for a filter. I bought a cheap 105mm lens as of July 28, 2016. Next will be to get an adapter to fit it onto the front somehow.

500mm f5.6 “Momma Bear” kit

Pentax Forums Review:

November 19, 2015:
I have just got this lens (the second version smc Pentax 6x7 500mm 1:5.6), so I will come back with a full review later. But initially I can say that the lens is big and heavy, which should come as no surprise. Also the focussing ring is rather stiff - possibly to do with its age (initially bought by the previous owner around 1982). It is still smooth, but it takes some effort to turn the ring.

The **weight** stated above (1430 grams) is **not** correct - my lens weighs in at **2961 grams** without front and rear covers (3012 grams with covers).
EDIT: Another error in the tables above: all variants of the smc Pentax-6x7 500mm F5.6 use the **inner bayonet**.

Read more at: http://www.pentaxforums.com/lensreviews/SMC-Pentax-67-500mm-F5.6-Lens.html#ixzz4FdDuSDyd

February 26, 2016:
I bought this lens mostly because the opportunity presented itself, but I am pleasantly surprised at the image quality of the lens, which is quite good, actually.

The lens is big and heavy and needs a tripod. The focus ring is still quite stiff, so handheld use is out of the question, though the previous owner is said to have used it for airshows.

The lens gives very good results on film - sharp and contrasty (Pentax 67 II) - and it will, I think, prove a useful addition to my assortment of lenses. The minimum focus distance is around 8 m, but since the lens itself has a very sturdy tripod mount and uses the inner bayonet, the close focus distance can be reduced by means of the normal set of extension tubes, which are fairly common.

I have also tested the lens on my Pentax K-5, and even though this lens is by no means meant for digital, the results were better than expected, but they will not stand up to intense pixel peeping. However, the lens is big and clumsy on a DSLR, and I would advice against purchasing it for that purpose. The lens shines on film.

From my tests on digital I know that F5.6 (fully open) and F8 are best avoided, whereas F11 is quite good and F16 is pretty sharp with little chromatic abberation.

May 4, 2016: I initially wrote: *In addition, the diaphragm does not open fully again [on my lens] after taking a shot when stopped down in AUTO. It works perfectly on MANUAL, and the blades are clean, so I suspect that the spring return mechanism is malfunctioning somehow. I can open the diaphragm again by selecting F5.6, but that is a bit tedious in the long run. Will see how it turns out in practice or if it loosens up with use.*
Well, I can now report that after a period of use and some extra manipulation of the aperture lever on the back of the lens, the diaphragm now opens and closes just as it should in AUTO. The lens must have been laying idle for a long time, but now it works perfectly. I have therefore upped the rating for handling from 6 to 7, and overall I find it quite a good lens when used on a Pentax 6x7 film camera.

https://www.flickr.com/photos/118788157@N03/27287909676/

My lens says SMC 67 f5.6 500mm os it comes from 1989 according to the Pentax Forum: http://www.pentaxforums.com/lensreviews/SMC-Pentax-67-500mm-F5.6-Lens.html

No teleconverter will work with this lens. However:

Engraved name: REAR CONVERTER 2X Grey finish. Same on 1.4x.
Designed for lenses 35 mm to 400 mm, but is compatible with all 6x7 lenses except for the leaf shutter lenses. Causes vignetting with the Shift 75 mm lens and lenses 500 mm and longer. The converter supports lenses with inner as well as outer bayonets.

Read more at: http://www.pentaxforums.com/lensreviews/6x7-Rear-Converter-2x.html#ixzz4GCax9tnc

Induro Tripod

Induro C414 $669 / £460 (inc VAT), head extra. This is the tripod I have

Max Height (column down): 66.8 in (170cm)
Max Height (column up): 77.2 in (196cm)
Min Height: 23.1 in (58cm)
Leg Sections: 4
Closed Length: 25.2 in (64cm)
Weight: 6.2 lbs (2.8kg)
Load capacity: 26.5 lbs (12kg)

C414

MATERIAL	Carbon Fiber
MAX HEIGHT (24° LEG ANGLE) W/COLUMN EXTENDED	77.25 in (196.22 cm)
MAX HEIGHT (24° LEG ANGLE) W/COLUMN RETRACTED	66.81 in (169.7 cm)
MIN HEIGHT (80° LEG ANGLE) W/SHORT COLUMN	7.75 in (19.81 cm)
FOLDED LENGTH	25.25 in (64.14 cm)
LEG LOCK TYPE	Moisture and dust-resistant locking knobs
INDEPENDENT LEG SPREAD	Yes, with three position stops
CENTER COLUMN	Grooved-Rapid
HEAD MOUNT THREAD SIZE	1/4"-20 & 3/8"-16
WEIGHT	6.22 lbs (2.82 kg)

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Induro C414 Carbon 8X C-Series 4-Section Carbon Fiber Tripod Legs - Supports 26.5 lbs (12 kg)

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600mm f4 “Daddy Bear” kit

There is a lot of information about this lens on the internet but no longer available unless you pay to see it. Luminous Landscape is the site. It is what I read so much before I bought this outfit. Then I followed up and bought the 400 and the 500mm lenses. I’m going to record what I can find here before the current information goes away. I refuse to pay for a web site like that. Mine is going away because of what it will cost to keep it. Facebook and Flicker are used now.

https://www.facebook.com/groups/8974536420/

Steve Rasmussen: The 400 and 600 Takumars are similar in performance, regarding definition. However the 400 has a much wider range of f-stops in which it performs well (f/5.6 to f/32). The 600 is hampered by CA from f/4 to f/11 in high contrast shots and performs well from f/13 to f/32. The 600 is hard to judge due to shutter induced vib. It become very evident that the 600 is way sharp when you attach a camera body to it that has no shutter vib. The 400 is much better corrected for longitudinal chromatic than the 600. The 300 Takumar is in a different league, meaning lesser quality when compared with the 400 and 600. The 300EDIF is a different story. It is as sharp as the 400/600 but without the CA.

A note about using filters on the 600 and 400-- The 400 has problems with rear filters causing flare, even coated filters. I use a front filter on my 400. The 600 does much better with rear filters, so I use the rear filter bay on mine. Use multi coated ones if you are going to do this.I have owned the 600 and 400 for 20 years now and used both with converters, so if you need any advice on these, let me know. The non-SMC lenses need a contrastier film to perform well.

I use my 400 and 600 for birds mostly and that requires the 2 piece outer bay tubes. Be aware that these extension tubes are rare and can be expensive. (I bought one #1 from KEH after reading that.)

The 800 Takumar was too much of a good thing and Pentax upgraded it with a smaller 800 with better color correction. I use the 600 + 1.4x instead of the 800.

I use my 400 and 600 for birds mostly and that requires the 2 piece outer bay tubes. Be aware that these extension tubes are rare and can be expensive.

Pentax Forums review:

The 600/4 was one of the original lenses when Pentax introduced the 6x7 system in 1969. I have the second and last 1971 version (SMC Takumar 6x7 600/4) and it has the same optics as its predecessor and the full SMC coatings. The SMC Takumar 6x7 600/4 was never updated and was still in production in the early 1990's. (I can't find any info on the actual discontinued date)

Usage:
The 6x7 600/4 features include a tripod mount, a manual diaphragm, a rear filter holder, a minimum aperture of f/45 and the older outer bayonet lens mount. The 6x7 600/4 weighs in at 6000g, is 370mm long and has a whopping 170mm front diameter!

Focusing is also a bit different on the 6x7 600/4, instead of a focusing ring there is focus adjusting knobs on either side of the lens. You turn the knobs forwards or backwards to adjust focusing. There is also a sight on top of the lens to help in lining up your subject before you focus.

Support is your biggest issue with this lens, as the lens & camera body will be over 7.5kg.
I'm currently using a Manfrotto 028B Triman tripod, a Manfrotto 229 3D super pro head and a Manfrotto 359 long lens support for the camera end. Shooting faster 400 ISO film will help in keeping the shutter speeds higher and still give you lots of DOF. Lugging all

this equipment on a shoot is not fun and I start to get sore arms after a couple hundred meters. Having someone assist in carrying some gear is always a big help, so if you have a spouse, kid, friend or mule things are much easier! I finally broke down and bought a folding cart to lug this lens around, much better on the old back.

Having a Pentax 67ii with interchangeable focusing screens is also a big plus, as a grid screen is great for leveling the horizon. Also if you are using a rear converter or extension tubes, one of the telephoto “bright” screens also makes it easier to focus.

CLOSE-UP WORK: These older 6x7 Takumar telephoto lenses all have a poor minimum focusing distance and the 6x7 600/4 is no exception (12.0 meters). If you want to get closer, you will need to use extension tubes. The 6x7 600/4 requires the use of the older “outer bayonet” extension tube set, which has only two tubes. This tube set is hard to find, but does work quite well. You can reduce the minimum focusing distance of the 6x7 600/4 down to 5.35 meters if you use both tubes.

REAR CONVERTERS: You can use the older T6-2X & 2X Outer Bayonet and the newer 1.4X & 2X rear converters with the 6x7 600/4. This will extend the focal length to 840mm or 1200mm and makes the 6x7 600/4 quite versatile. Pentax suggests when using the newer converters you stop down the aperture to f/8 or smaller, to avoid light fall off at the corners when shooting at or near fully open. I have used both the newer 1.4X & 2X converters with my 6x7 600/4 and the results are quite good, though you need to use faster shutter speeds to reduce vibrations.

FILTER: The 6x7 600/4 uses 77mm screw in filters, or Pentax 6x7 77mm bayonet filters. Filters are attached to a removable adapter ring, which screws into the rear of the lens.

CASE: The 6x7 600/4 comes with a dedicated metal trunk. The trunk has a hard plastic handle and is lockable.

HOOD: The 6x7 600/4 has a built-in hood that extends. The front of the lens is protected by a hard leather lens cover lined with fabric.

Summary:
The SMC Takumar 6x7 600/4 requires a lot of effort to carry around and setup, but the results can be very rewarding. If you don’t want to pay over $5K for a Pentax 6x7 800mm f/6.7 ED lens, then this is the way to go.

Price: I found my SMC Takumar 6x7 600/4 at KEH and it cost $1482.00USD. It was EXC condition and came with the metal trunk, front lens cover & rear lens cap. It turned out the lens is in EXC+ or better condition with no marks, but the trunk was closer to BGN condition. The trunk was missing three of the four metal feet and a couple rivets holding a side support piece in place, which eventually fell off. I had to take the trunk to a luggage repair shop and get the bottom four feet replaced with new rubber ones and some rivets redone to secure the trunks side supports. They also re-glued some of the

red fabric interior that had come loose. So for $30.00 I now have an EXC+ metal trunk to go with the lens!

Read more at: http://www.pentaxforums.com/lensreviews/SMC-Pentax-Takumar-67-600mm-F4-Lens.html#ixzz4FdAUm62q

Pentax Forums review:

I have owned this lens since 1996 and have used it quite a bit (for a large lens) and feel I am a pretty good judge of its capabilities.

This big and heavy lens takes some getting used to. It amplifies shutter vib enormously and makes shooting between 1/2 sec and 1/30 sec impossible, unless you use two tripods or a Wimberley+ long lens support. Caution, using 2 tripods for this lens and camera is a major pain! Any single tripod used should be at least 10 lbs and preferably 20 lbs. When using this lens on a fully extended tripod, even 1 second exposures will be soft due to shutter vib. This lens comes with a built-in lens hood and also has the ability to rotate the camera body within the lens mount for vertical shooting. It uses the outer bay mounting on the camera body. Longitudinal chromatic aberration is easily seen at f/4 but not in flat lighting conditions. By f/13 and beyond, color aberrations are not seen. One can see the reduction of the fringing in the finder as you stop down from f/4. This is strange to see! I use mine for sunsets, rainbows, lightning and birds (with tubes). It can be used for large mammals as well. It can be shot handheld but is a challenge. Forget packing this one in! I hauled mine 1/2 mile once and was exhausted. It is very sharp for big glass but not quite at the level of the 400mm Takumar. Its sharpest stop is f/16 and my estimate for lp/mm is 85-90. Part of the reason why this lens is sharp is due to it being so large in diameter. Physics tells us that diameter has a significant affect on resolution. One can get an accurate idea of this lens's sharpness when using a 35mm body on it because the shutter shake is so low that the image is not affected. The 600 has the 12 blade diaphragm like the 400. It can be set at 1/16 stop increments. Its huge front element is 150mm across and the optical cross section is made up of an APO triplet followed by a weak positive element and a negative achromat. It is corrected for red, blue and yellow because it fringes in violet and green (meaning that it is not corrected for violet and green). I use mine sometimes with a 35mm body attached for birds; this gives a 12x magnification. It doesn't use helical focusing like the smaller lenses; it uses a geared system with knobs. It makes for very quick focusing.

Lenses shorter than 400mm can get away with the use of conventional glass, however, at 600mm, colors are so difficult to control that 5 colors would need to be corrected to eliminate fringing. This is called superapochromatic (Super APO) correction and sometimes involves the use of low dispersion glass. This is what was done with the 800 EDIF, except that it may not be corrected for 5 colors; it may only be 4 colors (superachromatic). Unfortunately, the 600 was never upgraded like the 800 f/4 was, to ED status. There is a huge difference in color correction between the 400 Takumar and the 600. The 400 rarely fringes, while the 600 is plagued by it. This comparison only applies from f/4 to f/13. The use of a 1.4x converter on the 400 Takumar (560mm)

proves to have much less fringing than the 600mm at the wider stops. Pentax dropped the ball on the 600mm. When it was designed in the 70's, there was established technology to correct for 5 colors using conventional optical glass. This is what was needed to adequately correct colors for this lens. Why this was not done on a pro quality lens is a mystery. It is important to remember that this lens will have near zero fringing from f/16 to f/45.

This lens also uses a rear filter. It should be remembered that any filter placed in a converging light beam will cause aberrations to a small degree. In addition to this, one has to deal with the slight loss of contrast with rear filters. I rarely use rear filters on my 600. When I do, it is a multi-coated one. Rear filters also change the focus slightly.

The 1.4X rear converter (gray) will fit this outer bay lens. The lens should be stopped down to at least f/8 to reduce the longitudinal chromatic when using the converter. The results when using the 1.4x are amazing. No image degradation is seen. The 600 + 1.4 is at least as sharp as the 45mm, maybe sharper. Also, when using the outer bay extension tubes, the 1.4x needs to be attached to the camera with an extension tube placed in front of the converter. Using the 2X gray converter on this lens just adds to the shutter induced vibration. The lens needs to be stopped down to at least f/11 so that the 2X converter does not make fringing visible. The use of the 1.4X on the 600 actually reduces the CA a bit. With the lens at f/8, there is slight CA but at f/8 with the 1.4X added, it is much less. The 2X converter reduces CA also and probably as much or more than the 1.4X. The reason why both converters reduce CA is because of the following: uncorrected colors leaving the rear element will expand in footprint, the further they are from that element. So, putting a well color corrected converter in place, intercepts the diverging color rays and prevents further separation.
Using to 2X converter on this lens is more of a problem than the 1.4X. More shutter vib influence, more distance between the shutter and tripod and more magnification add up to soft images unless high speed film is used to get the shutter speed up to at least 1/125 sec. When this is done, images nearly as sharp as the 1.4x are produced; still very sharp.
The close focus of this lens is 39 feet but Pentax makes a two piece extension tube set (as mentioned above) that reduces this to 13 feet. The tubes are essential for most bird shooting. These two piece outer bay tubes have become rare, so be advised.

Lots of effort needs to be taken to use this lens successfully. I have published several shots from this monster so it can be done. Overall I like mine and consider it a good lens.

Read more at: http://www.pentaxforums.com/lensreviews/SMC-Pentax-Takumar-67-600mm-F4-Lens.html#ixzz4FdB0U7WT

There is a 77mm filter adapter ring inside the back of the lens. The adapter goes in upside down. Put the filter in the top then invert to install.

Outer Bay Extension Tubes

This hard to find “outer” bayonet extension tube set comprises two tubes: I bought the No. 1 tube from KEH late in July 2016 at $49 something shipped.

No. 1 - Length 23mm (110g)

No. 2 - Length 46mm (150g)

They can be used separately or in combination on any 6x7 lens with the “outer” bayonet mount, Takumar 400/4, 600/4, 800/4 and 1000/8 Reflex lens. There is a separate “inner” bayonet tube set for most other lenses. These extension tubes are used to reduce the minimum focusing distance of the above older telephoto lenses, which all have poor close focusing capabilities. The table below shows the lenses minimum focusing distance with no tubes and then with both tubes used:

Takumar 400/4:

No tubes: 26 feet or 8.0 meters

#1 tube: 14 feet. #1 & 2 tubes: 2.76 meters

Takumar 600/4:

No tubes: 40 feet or 12.1 meters

#1 tube: 26 feet #1 & 2 tubes: 5.35 meters

The tubes work well in reducing the minimum focusing distance, but there is the light loss penalty associated with using any extensions tubes that you also have to consider. I find these “outer” bayonet tubes are more difficult to mount than the “inner” ones and I also find it’s hard to judge the lenses minimum/maximum focusing distance when using these tubes. So it’s trial and error on which combination you need to use for a particular shot. You can’t “zoom with your feet” as you will be using a tripod for all these “big” lenses. You probably won’t use these tubes very much, but they are a necessity if you have any of the older Takumar telephotos and want to closer focus them. This extension tube set is very well built and comes with a leather case.

Read more at: http://www.pentaxforums.com/accessoryreviews/pentax-6x7-outer-bayonet-extension-tube-set.html#ixzz4FosQNMUa

DesertScape: This two piece tube set is really essential when using the outer bay lenses for bird and mammal work. The outer bay lenses do not have very good close focusing ability without tubes. I use mine on my 400 and 600 Takumars, mostly for birds. On occasion, this tube set is handy for flowers that cannot be reached with the shorter lenses. I find it better to use the longer tube in front of the shorter one for a better fit. These tubes are harder to use than the inner bay tubes. If one is very familiar with outer bay mounting, then these tubes are somewhat intuitive. If one is in a hurry, these tubes can be aggravating. The tube set reduces the close focus on the 600mm from 39 feet to 13 feet. A substantial reduction is seen on the 400mm as well. Overall, I like mine but it does take some getting used to. These tubes have gotten rare and are almost never seen for sale.

But I bought the No.1 outer bayonet extension ring. It focuses closest on the 600 f4 at 26 feet now.

The 400 f4 lens now focuses down to 14 feet. It is the same with the 1.4x teleconverter attached next to the camera.

Those measurements are to the film plane near the back of the camera.

https://youtu.be/iMe6sm4C8xA How to put it all together, filters, extension tube, teleconverter, lens.

Teleconverters 1.4x

http://www.pentaxforums.com/lensreviews/6x7-Rear-Converter-1.4x.html

This converter multiplies the focal length by 1.4. The light loss is one stop. The converter is more recent than the T5 version and is compatible with all 6x7 lenses except for the leaf shutter lenses. Refer the notes in the table below for caveats regarding lens compatibility.

It supports inner bayonet as well as outer bayonet lenses.

The 67 1.4X Rear Converter is the only “non dedicated” one Pentax made for the 6x7 system. (The M*800/6.7ED lens has it’s own dedicated T5-1.4X Rear Converter.)

Usage:
I bought the 67 1.4X converter to use with my 67 120/3.5 Soft & 6x7 Takumar 400/4 lenses. The 1.4X converter allows me to use my 120/3.5 Soft lens at a traditional portrait focal length of 168mm, or extend my 400/4 to a 560mm telephoto. This converter works with inner or outer bayonet lenses (see the usable lens list below) and is quite sharp, with only a one stop light loss penalty. The converter is also very small, so it does not take up a lot of room in your camera bag.

The only issue with this 1.4X converter is that it only works with a limited number of lenses. After doing some online research and using the Pentax instruction booklets, here is a list of Pentax 6x7 system lenses that it will work with. Using the 1.4X converter with lenses not listed may cause damage.

Pentax 120/3.5 Soft
Pentax 165/2.8
Takumar & Pentax 200/4
Takumar & Pentax 300/4
Pentax M*300/4 ED
Takumar 400/4
Pentax M*400/4 ED
Takumar 600/4
Takumar 800/4

CASE: The 67 1.4X Rear Converter comes with the S90-100 soft case.

Summary:
The 67 1.4X Rear Converter is a great Pentax 6x7 lens accessory and allows you to get more distance with specific lenses at a reasonable price, with minimal deterioration in picture quality.

Price: I found my 67 1.4X Rear Converter at KEH and it cost $235.00USD. It was EXC+ condition and came with both caps, I purchased the case separately.

Sample shots taken with the 67 1.4 X & 2X Rear Converters are in my review of the SMC 6x7 Takumar 400/4.

This gray converter is the latest design by Pentax. Their older ones were black. This converter is made like a lens; rubber grip surface, SMC glass, lens release slider and diaphragm connection for wide open metering. The automatic diaphragm function of the lens is retained when using the 1.4x converter. To my surprise, it even has outer bay tabs for mounting the outer bay lenses. You lose 1 stop of speed with the converter because you are extending the focal length. This changes the focal ratio since the diaphragm remains unchanged. Since the focal length has changed, the DOF scale on the lens you are using will not be accurate. One solution is to put hyperfocal marks on the lenses you plan to use with the 1.4x, that represent the longer focal length.

Optics-

The optical construction is 5 elements in 3 groups. It consists of a positive achromat upfront, followed by a negative achromat, then a single positive element. This lens is afocal. It will not form an image by itself. It needs the converging rays from another lens to do that. With 3 positive elements and 2 negative, one would think that it would not be afocal but be able to form an image by itself. Not so. This means that the 2 negative elements are high refractive index, high density glass. The positive elements are most likely low dispersion, low index glass. In the telescope world, a simple 2 element achromat is used to extend the focal length of the scope. They are known as Barlow lenses. The 1.4 and 2X converters for the 67 do the same thing. So why didn't Pentax use a 2 element Barlow design as TCs? They just do not correct the off axis aberrations well enough to be used for photography. The corners would be too soft.

I was surprised at how few lenses this converter will fit on. Sure it fits the 200 Pentax, 300 Takumar, 400 Takumar and 600 Takumar but it will not fit

the zooms, 105mm, 150 Takumar, 165 LS or 45mm. It was obviously designed for the longer lenses. As such, I suspect the use of ED glass in this converter. Strangely enough, when mounted on the 600 Takumar, it does not increase color fringing. It seems to actually reduce it. How can this be? The converter intercepts the rays before they reach the focal plane and before the colors can separate further. It does not allow them to separate as it would, had there been no converter in place. There is quite a distance between the rear element in the 600 and the film, so putting a highly color corrected converter in between is effective. One will get amazing results with the 600 + 1.4X when using the 600 stopped down as mentioned below. With the 200 Pentax, this 1.4X retains the sharpness of the lens. When used with the 600mm, the lens must be stopped down to at least f/13 to reduce color fringing. With the 400 Takumar, (another outer bay lens like the 600) the 1.4x converter works well at all stops. Using the 1.4x with outer bay lenses and the outer bay extension tubes is a bit strange. The setup will not fit if one tries to put the converter on the lens and then attach the tubes. This seems logical because the optics generally go in front of the tubes. But the tubes must be in front of the converter. This configuration seems to work okay though.

I have found that after having this converter for awhile now, that I seem to use it for my longer lenses and not as much for the 200 and 300mm.

When using the 1.4x with the Pentax 200, the sharpness results rival the 300mm EDIF-- Amazing. With the 200mm at f/11 + 1.4X, the estimated sharpness is 85-90 LP/mm.

Since this converter does not increase aberrations, it begs the question, how did they do that? The obvious answer is that the designer had to correct all seven aberrations within this converter so as not to add any at the focal plane. They were successful and created a great converter.

Be aware that the stock photo used is actually the 1.4x converter for the 800 EDIF lens. The normal 1.4x converter looks exactly like the new 2x converter and has Pentax 67 rear converter 1.4x - on the side of it.

Excellent coatings and performance. Shooting with this in place will not degrade the performance of the lens. I don't thing the 90 lens will work with this converter either.

It's a great way to gain another "lens" with actually doing so. The 200 lens at f/4 now becomes a 280 lens at f/5.6. Gets you close to a 300 lens, yet is still sharper (newer 67 version of the 200) than a 300 lens.

I've used this on my 400 EDIF lens for astrophotography making it a 560mm lens at f/5.6. Still fast enough for astro work, does not add or cause any aberrations, and stars are still sharp almost to the very edge of the film.

When adding this converter to an f/4 lens - the extra glass causes the reduction in light and the lens therefore becomes f/5.6. Just remember to leave the f stop on the lens at f/4. If you change it to f/5.6 thinking to match the converter setting - you will have just made the lens into f/8.

It's a handy item to have to extend existing lenses. But since getting the two Pentax zoom lenses, I rarely use the converter now except for astrophotography. This converter will not fit on the two zoom lenses.

Teleconverters 2x

http://www.pentaxforums.com/lensreviews/6x7-Rear-Converter-2x.html

Causes vignetting with the Shift 75 mm lens and lenses 500 mm and longer.

The 67 2X Rear Converter is the third one made for the 6x7 system and second one that supports both inner & outer bayonet lenses.

Usage:

I bought the 67 2X converter to use on my 6x7 Takumar 400/4 lens. The 2X converter allows me to extend my 400/4 to an 800mm telephoto. This “extended” focal length is perfect to occasionally shoot boats/freighters in the water around Vancouver, at a minimal cost.

The 67 2X converter works with most inner or outer bayonet lenses (see the exception list below), with a two stop light loss penalty. The 67 2X converter is almost twice the size of the 67 1.4X, but they are both close to the same weight. I find the 1.4X slightly sharper than the 2X converter.

Unlike the 67 1.4X converter, the 67 2X converter works on almost all Pentax 6x7 system lenses. Here is the “exception” list:

Pentax 75/4.5 Shift

Pentax 500/5.6

Pentax 800/6.7 ED

Takumar 1000/8 Reflex

The 67 2X converter also can’t be used on the 90/2.8 & 165/4 LS lenses in the leaf shutter mode.

CASE: The 67 2X Rear Converter comes with the S90-140 soft case.

Summary:

The 67 2X Rear Converter is a great Pentax 6x7 lens accessory that allows you to double the distance of most lenses at a very reasonable price, with just a minor deterioration in picture quality.

Price: I found my 67 2X Rear Converter at KEH and it cost $84.00USD. It was EXC+ condition and came with both caps, I purchased the case separately.

Sample shots taken with the 67 1.4 X & 2X Rear Converters are in my review of the SMC 6x7 Takumar 400/4.

Optics-

This converter is a 6 element type consisting of two cemented achromats in the front and an air spaced negative achromat in the rear. It is afocal in that it will not produce an image by itself. Since it is overall, negative, it changes the angle of the light cone to produce a larger image. It turns a non telephoto lens into a telephoto because it magnifies the image from the front group. Using this converter on a lens that is already a true telephoto (300 Takumar, 400 Takumar, 500mm etc.) can cause image degradation. The 300ED and 400 ED are not true telephotos, so using the 2x makes them a telephoto system. Converters not only magnify the image, they magnify aberrations as well. That is why it is critically important that the converter itself does not add any aberrations in its design. The lens elements of this converter appear to be multi-coated. There are 3 positive and 3 negative elements in this converter, so it looks to be a focal system but it does not form an image, so it cannot be. The 3 negative elements have to be high refractive index, high density glass to be able to make this converter afocal. All positive elements are probably low index glass.

Fit-

The fit onto the camera body and to the lenses is outstanding. The build quality is super (solid, nice hand grip, rugged). Surprisingly, this 2X fits on every lens I tried it on. The 1.4X is very limited regarding which lenses will fit. Even the 45mm, the two zooms and the 165LS will fit on the 2X. Of course it fits on the outer bay lenses because it has the outer bay tabs.

Shutter shake becomes a major problem with this converter because not only is the distance between the shutter and tripod increased, the added magnification aggravates the situation. Using the 2X on a 400mm or 600 becomes a problem. The use of fast film (400 or 800 speed) is required to increase the shutter speed to get sharp shots. The 600mm + 2x and 1/125 second shutter speed has worked well, although I had to brace the camera body with my hands. Using a 50 speed film and f/45 and long exposures (1-2 sec.) does not work. Shutter vib still blurs the shot.

Since this converter causes a 2 stop loss of light, that 2 stop difference can be used to increase the DOF of shots that were not possible before. As an example-- Let's say you needed to shoot a 200mm at f/45 to get enough DOF for a shot. This could be done with the 105mm plus 2X converter. It becomes a 210mm with f/45. The focal ratio changes because the diaphragm remains unchanged, yet the focal length is lengthened.

This converter allows wide open metering and also allows the lens to be shot wide open without having to stop down manually. In other words, all auto functions of the lenses are maintained. This is the same as the 1.4X converter.

Performance-

When using it on the 600mm, image degradation can easily be seen at f/4 but sharpens up by f/13 and beyond. Color correction in this converter is outstanding as evidenced by the use of the 400 and 600mm lenses on it. The 2x seems to actually improve the color fringing problem with the 600mm. After seeing the test in Luminous Landscape on this converter, I was expecting to see softness in my slides. Using Velvia 50 and the 165 LS, I shot a scene with fine detail in the middle ground and background. The slides were surprisingly sharp. As sharp as if it were shot from the 45mm. If one is careful in choosing the lens to put in front of the 2X, it can perform well. Putting the 300 Takumar in front is a mistake. Way too much shutter vib.

Conclusion-

It is better than I was expecting. Sharp when used with the best lenses. Cheap to own and good enough for publication purposes.

I bought this TC to use it with my Pentax-67 M*400mm/4, sure it's big and heavy (757 gr. with my K-mount adapter, so it's about 730 gr alone.). But i don't mind it's weight since it goes so well with the M*400mm.

Now, how it performs ?

For a TC-2x i was surprised, sure when you start with a great lens it helps a lot.

I find the photos to be sharp from f/5.6 to f/11 at f/4 it's a tad soft to my taste.

I even tried it with 64mm of Extension tubes to take frog shots and the sharpness is very good, you need a good tripod and head with MLU and a cable release with that set-up.

I also tried it with my SMC Takumar (6x7) 200mm/4, the sharpness is not as good as with my M*400mm/4 for sure because the lens is not as sharp to start with, but very usable if needed.

All in all a very surprysing performance for a TC-2X

Read more at: http://www.pentaxforums.com/lensreviews/6x7-Rear-Converter-2x.html#ixzz4Grr0NaGE

70mm

Kodak Monitor 616

April 25, 2016 https://youtu.be/ZUWmkvh5GAg

May 12, 2016 https://youtu.be/c_Ks5IUjOtI

620

Kodak Medalist II

https://youtu.be/8EBmwkgeNkA

https://www.youtube.com/watch?v=8EBmwkgeNkA&feature=youtu.be

$200+ a little

Just plug it in

Beseler 45H Enlarger

A bigger enlarger was needed to make prints from 70mm negatives. Both Melita and I have some. She has a full shoe box of them from 1900 on. I have a new old camera that was fitted with a new bellows from England. It is a Kodak Monitor 616 and takes 70mm film. New film in bulk was purchased from Ilford and I also have some older bulk film, as well as a few rolls and spools. I'll load my own.

It cost $200 including shipping. It arrived in just a few days. It was well packed.

I made an unboxing video of it. That is up on my YouTube channel: studiocarter1

Pinhole Cameras

Here is a gorgeous wooden pinhole camera. If you've wanted to try pinhole photography, but haven't gotten around to constructing your own pinhole camera yet, or if you've wanted to try out large format photography without committing to the expense of a large format camera, here is an option for you.

This pinhole camera is made of lacquered cherry wood. The sides are joined together with box joints. The inside of the camera is soft, black, and light-tight. The camera accepts standard 4x5 sheet film holders. A sheet film holder is included with this camera, although the holder looks as if it has seen a good amount of use and has not been tested for light-tightness.

The sheet film holder fits snugly against the back of the camera, and is held tight by two knobs. There are two tripod mounts on the camera that will allow for vertical or horizontal orientation on a tripod.

I'm not sure what size hole the pinhole is, but I did shoot a range of test photos with this camera to make sure it works properly, and I've found that, if using 100 speed film, a sunny day exposure time of about 7-8 seconds seems about right. Of course, pinhole camera definitely beg to be experimented with, so I encourage you to try different exposure times with different films to get the results most pleasing to you.

There is no shutter on this camera. It's designed so that cover the pinhole with your finger, pull the dark slide out from the holder, expose the image, place your finger back over the pinhole, and then slide the dark slide back in. I found that a little awkward when using it, and instead constructed a small cover for the pinhole out of foamcore. I'd recommend coming up with a similar solution unless you're using sheet film holders that have dark slides that glide extremely easily.

The last photo in this listing was shot with this camera.

https://www.etsy.com/listing/80088210/**cherry**-wood-4x5-**pinhole-camera**

In the cellar on the shelves are three different sizes with this one.

“Camera is in very good vintage/collectible condition. All dials, buttons etc function as they should. Wear on some leather areas and painted areas but not excessive (see photos) I have tested that all functions (shutter release, lens adjustment, focal plane shutter etc) are working well but I do not have the ability to test with actual film. Bellow in very good condition with no holes or tears. Barnett & Jaffe Baja case in good condition. Several areas have tome leather torn or missing. Hinges tight. Latches work well but center lock "tongue" is not on lock. It is in the case if it can be repaired.”

Pinhole

4x5 Cherry Wood

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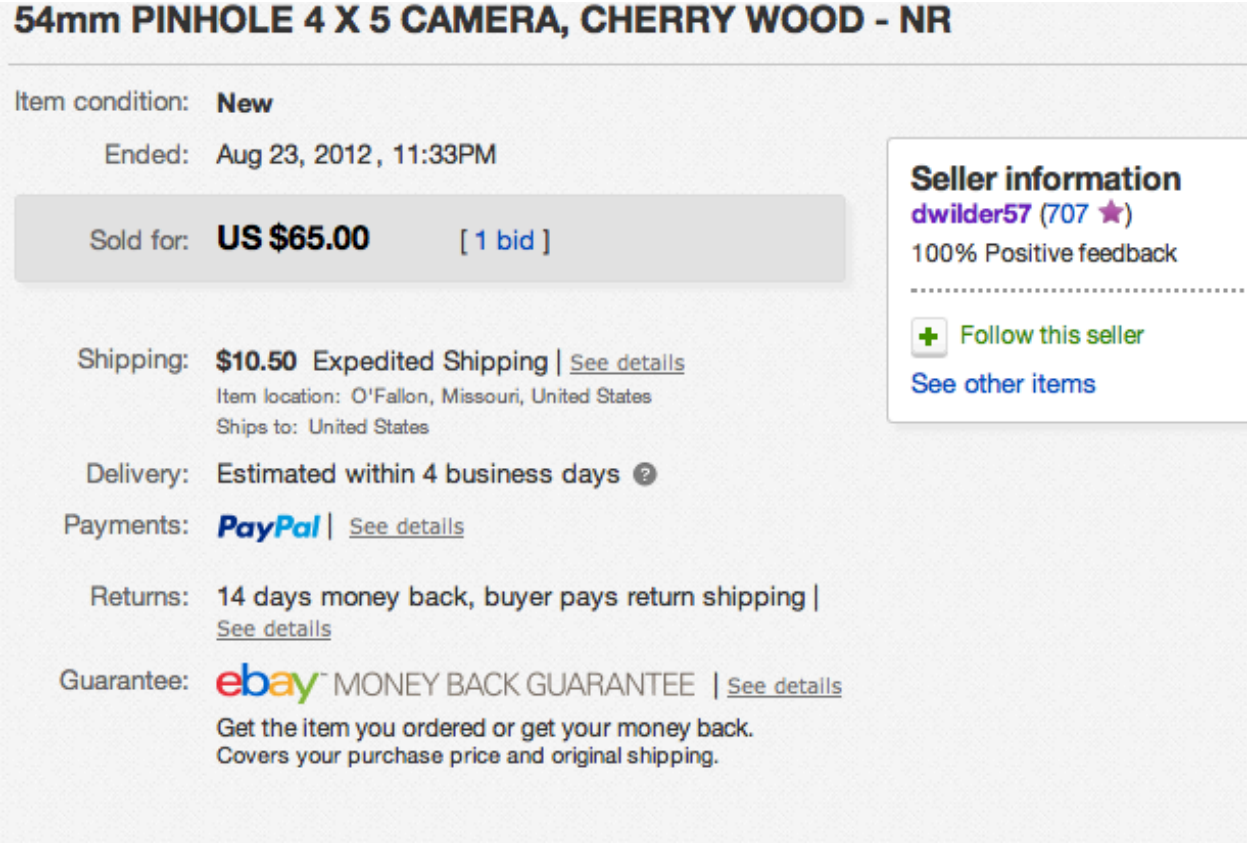
http://www.ebay.com/itm/54mm-PINHOLE-4-X-5-CAMERA-CHERRY-WOOD-NR-/170898419189

This new pinhole camera is handcrafted using Cherrry. The **54mm** camera has a speed of **f/108**. The lens is a **.020** inch pinhole in .016 brass. There are 1/4 inch tripod mounts on 2 sides so you can easily mount the camera for horizontal or vertical formats.
This camera is built with Cherrry wood and finished with Laquer. The inside of the camera is lined in poplar and has a flat black finish.
The 54mm focal length is very wide angle and tends to be dark in the corners.
This lens has no shutter, you just use your finger. Attach your filmholder to the back of the camera. Block the lens with your finger. Remove the darkslide from your filmholder. Remove your finger from the lens. Wait for the proper exposure time. Block the lens again with your finger and replace the darkslide. Since pinholes have a very long exposure, this process works well.

This camera will accept any standard 4X5 film holder, one used film holder is included in this auction.

http://www.ebay.com/itm/54mm-PINHOLE-4-X-5-CAMERA-CHERRY-WOOD-NR-/170898419189?nma=true&si=okBXjnp5uHn6r2OizxvdmFbv6hM%253D&orig_cvip=true&rt=nc&_trksid=p2047675.l2557



http://www.ebay.com/itm/54mm-PINHOLE-4-X-5-CAMERA-CHERRY-WOOD-NR-/170898419189